IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

GENENTECH, INC. and CITY OF HOPE Plaintiffs, v. AMGEN INC., Defendant.	)	C. A. No.: 17-1407-GMS **REDACTED - PUBLIC VERSION**

AMGEN INC.'S FIRST AMENDED ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIMS TO PLAINTIFFS' FIRST AMENDED AND SUPPLEMENTAL COMPLAINT

Defendant Amgen Inc. ("Amgen"), by and through its undersigned attorneys, hereby submits its Answer, Affirmative Defenses, and Counterclaims to the First Amended and Supplemental Complaint for Patent Infringement and Declaratory Judgment ("Complaint"), filed by Genentech, Inc. and City of Hope (collectively, "Plaintiffs") on December 6, 2017.

Pursuant to Fed. R. Civ. P. 8(b)(3), Amgen denies each and every allegation in the Complaint, whether express or implied, except those specifically and expressly admitted below. Any factual allegation admitted below is admitted only as to the specific admitted facts, not as to any purported conclusions, characterizations, implications, or speculations that may arguably follow from the admitted facts. To the extent any allegation in the Complaint is vague and/or ambiguous, Amgen denies such allegations. Amgen denies that Plaintiffs are entitled to the relief requested or any other relief.

The headings and subheadings in Amgen's Answer are used solely for purposes of convenience and organization to mirror those appearing in the Complaint; to the extent that any headings or other non-numbered statements in the Complaint contain or imply any allegations,

Amgen denies each and every allegation therein. Each of the numbered paragraphs in the Answer below corresponds to the same-numbered paragraphs in the Complaint.

NATURE OF THE CASE

1. Amgen admits that Avastin® (hereinafter "Avastin") contains the antibody bevacizumab; that the FDA-approved label for Avastin indicates that Avastin was initially approved by the U.S. FDA in 2004, and that Avastin is now approved for the specific indications listed in the Indications and Usage section of the FDA-approved label for Avastin. Amgen lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 1, and on that basis denies them.

2. Amgen admits that in November 2016, Amgen filed its Biologics License Application ("BLA") for Mvasi™, a biosimilar version of Avastin, pursuant to the Biologics Price Competition and Innovation Act ("BPCIA"), 42 U.S.C. § 262. The remaining allegations of paragraph 2 are legal conclusions that require no response, and on that basis Amgen denies them.

3. Amgen admits that the Patent Office has issued patents relating to bevacizumab. Amgen lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 3, and on that basis denies them.

4. The allegations of paragraph 4 are legal conclusions that require no response, and on that basis Amgen denies them.

5. Amgen admits that on January 4, 2017, it received notification from the FDA that its BLA for Mvasi™ had been accepted for review. Amgen admits that 42 U.S.C. § 262(*l*)(2)(A) states that "Not later than 20 days after the Secretary notifies the subsection (k) applicant that the application has been accepted for review, the subsection (k) applicant . . . shall provide to the

reference product sponsor a copy of the application submitted to the Secretary under subsection (k), and such other information that describes the process or processes used to manufacture the biological product that is the subject of such application." The remaining allegations of paragraph 5 are legal conclusions that require no response, and on that basis Amgen denies them.

6. Amgen admits that 42 U.S.C. § 262(*l*)(3)(A) states that "Not later than 60 days after the receipt of the application and information under paragraph (2), the reference product sponsor shall provide to the subsection (k) applicant . . . a list of patents for which the reference product sponsor believes a claim of patent infringement could reasonably be asserted by the reference product sponsor, or by a patent owner that has granted an exclusive license to the reference product sponsor with respect to the reference product, if a person not licensed by the reference product sponsor engaged in the making, using, offering to sell, selling, or importing into the United States of the biological product that is the subject of the subsection (k) application." Amgen admits that 35 U.S.C. § 271(e)(6)(C) states that "The owner of a patent that should have been included in the list described in section 351(*l*)(3)(A) of the Public Health Service Act, including as provided under section 351(*l*)(7) of such Act for a biological product, but was not timely included in such list, may not bring an action under this section for infringement of the patent with respect to the biological product." The remaining allegations of paragraph 6 are legal conclusions that require no response, and on that basis Amgen denies them.

7. Amgen admits that on January 13, 2017, Genentech asked Amgen to provide information "in addition to the ABP 215 aBLA . . . irrespective of whether it is contained in the aBLA." Amgen denies that it had any obligation under the BPCIA or otherwise to respond to or comply with Genentech's demand. Amgen admits that it provided its BLA for ABP 215, and

other information describing the manufacture of ABP 215, to Genentech starting in January 2017. Amgen denies the remaining allegations of paragraph 7.

8. Amgen admits that on February 15, 2017, Genentech sued Amgen in the United States District Court for the District of Delaware, alleging that Amgen had failed to comply with purported statutory obligations under the BPCIA. Amgen further admits that Genentech's complaint was dismissed for lack of subject matter jurisdiction, and that Genentech subsequently provided a list of patents purporting to comply with 42 U.S.C. § 262(*l*)(3)(A). The remaining allegations of paragraph 8 are legal conclusions that require no response, and on that basis Amgen denies them.

9. Amgen admits that on May 23, 2017, it served disclosures in compliance with 42 U.S.C. § 262(*l*)(3)(B), and that pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II), Amgen stated that "it does not intend to begin commercial marketing of its ABP 215 biosimilar product before the dates of expiration, set forth below, of the following U.S. patents previously identified in Genentech's § 262(*l*)(3)(A) list of patents," and referenced U.S. Patent Nos. 6,054,297; 6,121,428; 6,242,177; 6,331,415; 6,884,879; 7,297,334; 7,375,193; and 7,923,221. Amgen admits that the latest expiration date for those patents is December 18, 2018. Amgen denies the remaining allegations of paragraph 9.

10. Amgen denies the allegations of paragraph 10.

11. Amgen admits that it performed FDA pre-approval inspection (PAI) manufacturing of its ABP 215 drug substance in [redacted]. Amgen admits that Genentech previously inquired about "the size of these manufacturing runs or whether any of the drug substance produced is intended for commercial scale." Amgen admits that on May 8, 2017, it explained to Genentech that "pre-FDA approval manufacturing runs are mandated by the

FDA," and that Genentech had failed to explain how "any pre-FDA approval manufacturing done by Amgen is relevant to the information exchange between the parties under the BPCIA," or why "information regarding the size of pre-approval manufacturing runs Genentech seeks is relevant to or required to be provided under the BPCIA." Amgen denies that its manufacturing activities alleged in paragraph 11 are not protected from infringement pursuant to 35 U.S.C. § 271(e)(1). Amgen denies the remaining allegations of paragraph 11.

12. Amgen admits that on July 22, 2017, Amgen received a 559-page statement from Genentech purporting to comply with Genentech's statutory obligations pursuant to 42 U.S.C. § 262(*l*)(3)(C), that those materials discuss Amgen confidential information, and that Genentech has not attached its 559-page statement to the Complaint. Amgen denies the remaining allegations of paragraph 12.

13. Amgen admits that it required time to review Genentech's purported statement under 42 U.S.C. § 262(*l*)(3)(C)and to clarify Genentech's position before negotiations pursuant to 42 U.S.C. § 262(*l*)(4) began, due to numerous deficiencies and omissions in Genentech's purported statement, which were the subject of subsequent correspondence between the parties. Amgen denies the remaining allegations of paragraph 13.

14. The allegations in the first sentence of paragraph 14 are legal conclusions that require no response. To the extent that those allegations require a response, Amgen denies all characterizations of the law that are inconsistent with the referenced statutes and/or pertinent case law. Amgen admits that on October 6, 2017, it provided notice pursuant to 42 U.S.C. § 262(*l*)(8) and filed a lawsuit in the Central District of California seeking declaratory relief as to all patents listed on Genentech's 42 U.S.C. § 262(*l*)(3)(A) disclosure. Amgen denies the remaining allegations of paragraph 14.

15. Amgen admits that the parties began negotiations pursuant to 42 U.S.C. § 262(*l*)(4), during an in-person meeting held on September 14, 2017. Amgen also admits that Genentech stated during that meeting that it would assert all of the patents asserted in the Complaint pursuant to 42 U.S.C. § 262(*l*)(6). Amgen denies the remaining allegations of paragraph 15.

16. Amgen admits that on October 2, 2017, it sent Genentech a letter stating that the parties had been unable to reach "an agreement on a final and complete list of which, if any, patents listed by Genentech under § 262(*l*)(3)(A) shall be the subject of an action for patent infringement under § 262(*l*)(6)," and that it would "be in touch regarding § 262(*l*)(5)." Amgen denies the remaining allegations of paragraph 16.

17. Amgen admits the allegations in the first sentence of paragraph 17. Amgen admits that on October 6, 2017, it separately provided notice to Genentech pursuant to 42 U.S.C. § 262(*l*)(8) that "it will commence commercial marketing of Mvasi™ (a/k/a ABP215) no earlier than 180 days from the date of this letter." Amgen admits that on October 6, 2017, it filed a lawsuit against Plaintiffs in the Central District of California seeking declaratory judgment with respect to all of the patents that Genentech purported to identify pursuant to 42 U.S.C. § 262(*l*)(3)(A). Amgen denies the remaining allegations of paragraph 17.

18. Amgen denies the allegations in paragraph 18.

19. Amgen admits that Genentech has brought an action seeking relief against Amgen. Amgen denies that Genentech is entitled to any such relief, requested or otherwise. Amgen denies the remaining allegations of paragraph 19.

THE PARTIES

20. Amgen admits the allegations in the first sentence of paragraph 20. Amgen lacks

knowledge or information sufficient to form a belief as to the truth of the allegations in the second sentence of paragraph 20, and on that basis denies them. Amgen denies the remaining allegations of paragraph 20.

21. Amgen admits the allegations of paragraph 21.

22. Amgen admits the allegations of paragraph 22.

23. Amgen admits the allegations in the first sentence of paragraph 23. Amgen admits it has been a reference product sponsor in other proceedings pursuant to the BPCIA, and is the subsection (k) applicant in the present case, and challenges Plaintiffs' allegations of patent infringement on the basis of, for example, noninfringement, invalidity, and unenforceability amongst other defenses, as set forth in this responsive pleading, and asserts counterclaims of, for example, noninfringement, invalidity, and unenforceability as set forth in this responsive pleading. Amgen denies the remaining allegations of paragraph 23.

JURISDICTION AND VENUE

24. Amgen denies that the Court has subject matter jurisdiction over all Counts identified in the Complaint, for at least the reasons stated in connection with Amgen's granted motion to dismiss. The remaining allegations in paragraph 24 are legal conclusions that require no response, and on that basis Amgen denies them.

25. Amgen admits that it is incorporated in the state of Delaware. The remaining allegations in paragraph 25 contain legal conclusions that require no response, and on that basis Amgen denies them.

26. The allegations in paragraph 26 contain legal conclusions that require no response, and on that basis Amgen denies them.

27. Amgen admits that it is incorporated in the state of Delaware. The remaining allegations in paragraph 27 contain legal conclusions that require no response, and on that basis Amgen denies them.

FACTUAL BASIS FOR RELIEF

28. Amgen admits the allegations in the first sentence of paragraph 28. The remaining allegations in paragraph 28 contain legal conclusions that require no response, and on that basis Amgen denies them.

29. The allegations in paragraph 29 contain legal conclusions that require no response, and on that basis Amgen denies them.

30. Amgen admits that Genentech is the "reference product sponsor" with respect to Avastin®. Amgen lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 30, and on that basis denies them.

THE GENENTECH PATENTS

31. Amgen admits that on March 24, 2017, Genentech served a list of 27 patents purporting to comply with Genentech's statutory obligations pursuant to 42 U.S.C. § 262(*l*)(3)(A). Amgen admits that in its purported statement under 42 U.S.C. § 262(*l*)(3)(C), Genentech did not provide Amgen with a detailed statement that described the factual and legal basis of Genentech's opinion that U.S. Patent Nos. 7,323,553 and 6,610,516—both addressed in Amgen's detailed statement under 42 U.S.C. § 262(*l*)(3)(B)(ii)(I)—will be infringed by the commercial marketing of Amgen's Mvasi™ (a/k/a ABP 215) product, or hundreds of claims from the other patents, on its purported 42 U.S.C. 262(*l*)(3)(A) list, stating it "did not presently allege" infringement of those patents and claims and considered any disputes relating to them "moot." Nor did Genentech provide Amgen with a response to Amgen's statement under 42

U.S.C. § 262(*l*)(3)(B)(ii)(I) statement concerning the validity and enforceability of U.S. Patent Nos. 7,323,553 and 6,610,516. The remaining allegations of paragraph 31 call for legal conclusions for which no response is required, and on that basis Amgen denies them.

32. Amgen admits that U.S. Patent No. 9,795,672 issued on October 24, 2017. Amgen denies that U.S. Patent No. 9,795,672 was "duly and legally" issued. Amgen denies the remaining allegations of paragraph 32.

33. Amgen admits that Genentech purports to have provided to Amgen, pursuant to 42 U.S.C. § 262(*l*)(7), a supplement to its list of patents pursuant to 42 U.S.C. 262(l)(3)(A) to include U.S. Patent No. 9,795,672. Amgen admits that it provided Genentech, at least by email dated December 1, 2017, a detailed statement satisfying any obligation Amgen may have had pursuant to 42 U.S.C. § 262(*l*)(7)(B) and § 262(*l*)(3)(B). Amgen denies the remaining allegations of paragraph 33.

34. Amgen admits that Genentech alleges infringement of the Asserted Patents (as identified in the Table accompanying paragraph 34) by the manufacture, use, sale, or offer for sale of ABP 215. Amgen denies the merits of Genentech's allegations of infringement. Amgen denies the remaining allegations of paragraph 34.

35. The allegations in paragraph 35 contain legal conclusions that require no response, and on that basis Amgen denies them.

Count 1
(Declaratory Judgment That Amgen May Not Market Prior to December 18, 2018)

36. Amgen incorporates each of its responses to the preceding paragraphs as if fully set forth herein.

37. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

38. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

39. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

40. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

41. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

42. Pursuant to the Court's memorandum and order dated April 17, 2018, Dkt. 86–87, Count 1 has been dismissed and therefore no response is required.

Count 2
(Infringement of the '297 Patent)

43. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

44. Amgen admits that U.S. Patent No. 6,054,297 ("the '297 patent"), a copy of which is attached as Exhibit A to the Complaint, issued on April 25, 2000. Amgen denies that the '297 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 44.

45. Amgen denies the allegations of paragraph 45.

46. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '297 patent. Amgen denies the remaining allegations of paragraph 46.

47. Amgen denies the allegations of paragraph 47.

48. Amgen denies the allegations of paragraph 48.

49. Amgen denies the allegations of paragraph 49.

50. Amgen denies the allegations of paragraph 50.

Count 3
(Declaratory Judgment of Infringement of the '297 Patent)

51. Amgen denies the allegations of paragraph 51.

52. Amgen denies the allegations of paragraph 52.

Count 4
(Infringement of the '428 Patent)

53. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

54. Amgen admits that U.S. Patent No. 6,121,428 ("the '428 patent"), a copy of which is attached as Exhibit B to the Complaint, issued on September 19, 2000. Amgen denies that the '428 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 54.

55. Amgen denies the allegations of paragraph 55.

56. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '428 patent. Amgen denies the remaining allegations of paragraph 56.

57. Amgen denies the allegations of paragraph 57.

58. Amgen denies the allegations of paragraph 58.

59. Amgen denies the allegations of paragraph 59.

60. Amgen denies the allegations of paragraph 60.

Count 5
(Declaratory Judgment of Infringement of the '428 Patent)

61. Amgen denies the allegations of paragraph 61.

62. Amgen denies the allegations of paragraph 62.

63. Amgen denies the allegations of paragraph 63.

Count 6
(Infringement of the '177 Patent)

64. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

65. Amgen admits that U.S. Patent No. 6,242,177 ("the '177 patent"), a copy of which is attached as Exhibit C to the Complaint, issued on June 5, 2001. Amgen denies that the '177 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 65.

66. Amgen denies the allegations of paragraph 66.

67. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '177 patent. Amgen denies the remaining allegations of paragraph 67.

68. Amgen denies the allegations of paragraph 68.

69. Amgen denies the allegations of paragraph 69.

70. Amgen denies the allegations of paragraph 70.

71. Amgen denies the allegations of paragraph 71.

Count 7
(Declaratory Judgment of Infringement of the '177 Patent)

72. Amgen denies the allegations of paragraph 72.

73. Amgen denies the allegations of paragraph 73.

74. Amgen denies the allegations of paragraph 74.

Count 8
(Infringement of the '415 Patent)

75. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

76. Amgen admits that U.S. Patent No. 6,331,415 ("the '415 patent"), a copy of which is attached as Exhibit D to the Complaint, issued on December 18, 2001. Amgen denies that the '415 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 76.

77. Amgen denies the allegations of paragraph 77.

78. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '415 patent. Amgen denies the remaining allegations of paragraph 78.

79. Amgen denies the allegations of paragraph 79.

80. Amgen denies the allegations of paragraph 80.

81. Amgen denies the allegations of paragraph 81.

82. Amgen denies the allegations of paragraph 82.

Count 9
(Declaratory Judgment of Infringement of the '415 Patent)

83. Amgen denies the allegations of paragraph 83.

84. Amgen denies the allegations of paragraph 84.

85. Amgen denies the allegations of paragraph 85.

Count 10
(Infringement of the '213 Patent)

86. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

87. Amgen admits that U.S. Patent No. 6,407,213 ("the '213 patent"), a copy of

which is attached as Exhibit E to the Complaint, issued on June 18, 2002. Amgen denies that the '213 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 87.

88. Amgen denies the allegations of paragraph 88.

89. Amgen denies the allegations of paragraph 89.

90. Amgen denies the allegations of paragraph 90.

91. Amgen denies the allegations of paragraph 91.

92. Amgen denies the allegations of paragraph 92.

93. Amgen denies the allegations of paragraph 93.

Count 11
(Declaratory Judgment of Infringement of the '213 Patent)

94. Amgen denies the allegations of paragraph 94.

95. Amgen denies the allegations of paragraph 95.

96. Amgen denies the allegations of paragraph 96.

Count 12
(Infringement of the '335 Patent)

97. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

98. Amgen admits that U.S. Patent No. 6,417,335 ("the '335 patent"), a copy of which is attached as Exhibit F to the Complaint, issued on July 9, 2002. Amgen denies that the '335 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 98.

99. Amgen denies the allegations of paragraph 99.

100. Amgen denies the allegations of paragraph 100.

101. Amgen denies the allegations of paragraph 101.

102. Amgen denies the allegations of paragraph 102.

103. Amgen denies the allegations of paragraph 103.

104. Amgen denies the allegations of paragraph 104.

Count 13
(Declaratory Judgment of Infringement of the '335 Patent)

105. Amgen denies the allegations of paragraph 105.

106. Amgen denies the allegations of paragraph 106.

107. Amgen denies the allegations of paragraph 107.

Count 14
(Infringement of the '206 Patent)

108. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

109. Amgen admits that U.S. Patent No. 6,586,206 ("the '206 patent"), a copy of which is attached as Exhibit G to the Complaint, issued on July 1, 2003. Amgen denies that the '206 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 109.

110. Amgen denies the allegations of paragraph 110.

111. Amgen denies the allegations of paragraph 111.

112. Amgen denies the allegations of paragraph 112.

113. Amgen denies the allegations of paragraph 113.

114. Amgen denies the allegations of paragraph 114.

Count 15
(Declaratory Judgment of Infringement of the '206 Patent)

115. Amgen denies the allegations of paragraph 115.

116. Amgen denies the allegations of paragraph 116.

117. Amgen denies the allegations of paragraph 117.

Count 16
(Infringement of the '918 Patent)

118. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

119. Amgen admits that U.S. Patent No. 6,620,918 ("the '918 patent"), a copy of which is attached as Exhibit H to the Complaint, issued on September 16, 2003. Amgen denies that the '918 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 119.

120. Amgen denies the allegations of paragraph 120.

121. Amgen denies the allegations of paragraph 121.

122. Amgen denies the allegations of paragraph 122.

123. Amgen denies the allegations of paragraph 123.

124. Amgen denies the allegations of paragraph 124.

Count 17
(Declaratory Judgment of Infringement of the '918 Patent)

125. Amgen denies the allegations of paragraph 125.

126. Amgen denies the allegations of paragraph 126.

127. Amgen denies the allegations of paragraph 127.

Count 18
(Infringement of the '034 Patent)

128. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

129. Amgen admits that U.S. Patent No. 6,870,034 ("the '034 patent"), a copy of which is attached as Exhibit I to the Complaint, issued on March 22, 2005. Amgen denies that the '034 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 129.

130. Amgen denies the allegations of paragraph 130.

131. Amgen denies the allegations of paragraph 131.

132. Amgen denies the allegations of paragraph 132.

133. Amgen denies the allegations of paragraph 133.

134. Amgen denies the allegations of paragraph 134.

Count 19
(Declaratory Judgment of Infringement of the '034 Patent)

135. Amgen denies the allegations of paragraph 135.

136. Amgen denies the allegations of paragraph 136.

137. Amgen denies the allegations of paragraph 137.

Count 20
(Infringement of the '879 Patent)

138. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

139. Amgen admits that U.S. Patent No. 6,884,879 ("the '879 patent"), a copy of which is attached as Exhibit J to the Complaint, issued on April 26, 2005. Amgen denies that the '879 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 139.

140. Amgen denies the allegations of paragraph 140.

141. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement

pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '879 patent. Amgen denies the remaining allegations of paragraph 141.

142. Amgen denies the allegations of paragraph 142.

143. Amgen denies the allegations of paragraph 143.

144. Amgen denies the allegations of paragraph 144.

145. Amgen denies the allegations of paragraph 145.

Count 21
(Declaratory Judgment of Infringement of the '879 Patent)

146. Amgen denies the allegations of paragraph 146.

147. Amgen denies the allegations of paragraph 147.

148. Amgen denies the allegations of paragraph 148.

Count 22
(Declaratory Judgment of Infringement of the '269 Patent)

149. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

150. Amgen admits that U.S. Patent No. 7,060,269 ("the '269 patent"), a copy of which is attached as Exhibit K to the Complaint, issued on June 13, 2006. Amgen denies that the '269 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 150.

151. Amgen denies the allegations of paragraph 151.

152. Amgen denies the allegations of paragraph 152.

153. Amgen denies the allegations of paragraph 153.

154. Amgen denies the allegations of paragraph 154.

155. Amgen denies the allegations of paragraph 155.

156. Amgen denies the allegations of paragraph 156.

157. Amgen denies the allegations of paragraph 157.

158. Amgen denies the allegations of paragraph 158.

Count 23
(Infringement of the '901 Patent)

159. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

160. Amgen admits that U.S. Patent No. 7,169,901 ("the '901 patent"), a copy of which is attached as Exhibit L to the Complaint, issued on January 30, 2007. Amgen denies that the '901 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 160.

161. Amgen denies the allegations of paragraph 161.

162. Amgen denies the allegations of paragraph 162.

163. Amgen denies the allegations of paragraph 163.

164. Amgen denies the allegations of paragraph 164.

165. Amgen denies the allegations of paragraph 165.

166. Amgen denies the allegations of paragraph 166.

Count 24
(Declaratory Judgment of Infringement of the '901 Patent)

167. Amgen denies the allegations of paragraph 167.

168. Amgen denies the allegations of paragraph 168.

169. Amgen denies the allegations of paragraph 169.

Count 25
(Infringement of the '193 Patent)

170. Amgen incorporates its responses to each of the preceding paragraphs as if fully

set forth herein.

171. Amgen admits that U.S. Patent No. 7,375,193 ("the '193 patent"), a copy of which is attached as Exhibit M to the Complaint, issued on May 20, 2008. Amgen denies that the '193 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 171.

172. Amgen denies the allegations of paragraph 172.

173. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '193 patent. Amgen denies the remaining allegations of paragraph 173.

174. Amgen denies the allegations of paragraph 174.

175. Amgen denies the allegations of paragraph 175.

176. Amgen denies the allegations of paragraph 176.

177. Amgen denies the allegations of paragraph 177.

Count 26
(Declaratory Judgment of Infringement of the '193 Patent)

178. Amgen denies the allegations of paragraph 178.

179. Amgen denies the allegations of paragraph 179.

180. Amgen denies the allegations of paragraph 180.

Count 27
(Declaratory Judgment of Infringement of the '115 Patent)

181. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

182. Amgen admits that U.S. Patent No. 7,622,115 ("the '115 patent"), a copy of which is attached as Exhibit N to the Complaint, issued on November 24, 2009. Amgen denies

that the '115 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 182.

183. Amgen denies the allegations of paragraph 183.

184. Amgen denies the allegations of paragraph 184.

185. Amgen denies the allegations of paragraph 185.

186. Amgen denies the allegations of paragraph 186.

187. Amgen denies the allegations of paragraph 187.

188. Amgen denies the allegations of paragraph 188.

189. Amgen denies the allegations of paragraph 189.

Count 28
(Infringement of the '799 Patent)

190. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

191. Amgen admits that U.S. Patent No. 7,807,799 ("the '799 patent"), a copy of which is attached as Exhibit O to the Complaint, issued on October 5, 2010. Amgen denies that the '799 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 191.

192. Amgen denies the allegations of paragraph 192.

193. Amgen denies the allegations of paragraph 193.

194. Amgen denies the allegations of paragraph 194.

195. Amgen denies the allegations of paragraph 195.

196. Amgen denies the allegations of paragraph 196.

197. Amgen denies the allegations of paragraph 197.

Count 29

(Declaratory Judgment of Infringement of the '799 Patent)

198. Amgen denies the allegations of paragraph 198.

199. Amgen denies the allegations of paragraph 199.

200. Amgen denies the allegations of paragraph 200.

Count 30
(Infringement of the '221 Patent)

201. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

202. Amgen admits that U.S. Patent No. 7,923,221 ("the '221 patent"), a copy of which is attached as Exhibit P to the Complaint, issued on April 12, 2011. Amgen denies that the '221 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 202.

203. Amgen denies the allegations of paragraph 203.

204. Amgen admits that its 42 U.S.C. § 262(*l*)(3)(B) disclosures included a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II) with respect to the '221 patent. Amgen denies the remaining allegations of paragraph 204.

205. Amgen denies the allegations of paragraph 205.

206. Amgen denies the allegations of paragraph 206.

207. Amgen denies the allegations of paragraph 207.

208. Amgen denies the allegations of paragraph 208.

Count 31
(Declaratory Judgment of Infringement of the '221 Patent)

209. Amgen denies the allegations of paragraph 209.

210. Amgen denies the allegations of paragraph 210.

211. Amgen denies the allegations of paragraph 211.

Count 32
(Infringement of the '017 Patent)

212. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

213. Amgen admits that U.S. Patent No. 8,044,017 ("the '017 patent"), a copy of which is attached as Exhibit Q to the Complaint, issued on October 25, 2011. Amgen denies that the '017 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 213.

214. Amgen denies the allegations of paragraph 214.

215. Amgen denies the allegations of paragraph 215.

216. Amgen denies the allegations of paragraph 216.

217. Amgen denies the allegations of paragraph 217.

218. Amgen denies the allegations of paragraph 218.

Count 33
(Declaratory Judgment of Infringement of the '017 Patent)

219. Amgen denies the allegations of paragraph 219.

220. Amgen denies the allegations of paragraph 220.

Count 34
(Infringement of the '895 Patent)

221. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

222. Amgen admits that U.S. Patent No. 8,460,895 ("the '895 patent"), a copy of which is attached as Exhibit R to the Complaint, issued on June 11, 2013. Amgen denies that the '895 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph

222.

223. Amgen denies the allegations of paragraph 223.

224. Amgen denies the allegations of paragraph 224.

225. Amgen denies the allegations of paragraph 225.

226. Amgen denies the allegations of paragraph 226.

227. Amgen denies the allegations of paragraph 227.

Count 35
(Declaratory Judgment of Infringement of the '895 Patent)

228. Amgen denies the allegations of paragraph 228.

229. Amgen denies the allegations of paragraph 229.

Count 36
(Infringement of the '983 Patent)

230. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

231. Amgen admits that U.S. Patent No. 8,512,983 ("the '983 patent"), a copy of which is attached as Exhibit S to the Complaint, issued on August 20, 2013. Amgen denies that the '983 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 231.

232. Amgen denies the allegations of paragraph 232.

233. Amgen denies the allegations of paragraph 233.

234. Amgen denies the allegations of paragraph 234.

235. Amgen denies the allegations of paragraph 235.

236. Amgen denies the allegations of paragraph 236.

Count 37
(Declaratory Judgment of Infringement of the '983 Patent)

237. Amgen denies the allegations of paragraph 237.

238. Amgen denies the allegations of paragraph 238.

Count 38
(Infringement of the '869 Patent)

239. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

240. Amgen admits that U.S. Patent No. 8,574,869 ("the '869 patent"), a copy of which is attached as Exhibit T to the Complaint, issued on November 5, 2013. Amgen denies that the '869 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 240.

241. Amgen denies the allegations of paragraph 241.

242. Amgen denies the allegations of paragraph 242.

243. Amgen denies the allegations of paragraph 243.

244. Amgen denies the allegations of paragraph 244.

245. Amgen denies the allegations of paragraph 245.

Count 39
(Declaratory Judgment of Infringement of the '869 Patent)

246. Amgen denies the allegations of paragraph 246.

247. Amgen denies the allegations of paragraph 247.

Count 40
(Infringement of the '302 Patent)

248. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

249. Amgen admits that U.S. Patent No. 8,633,302 ("the '302 patent"), a copy of which is attached as Exhibit U to the Complaint, issued on January 21, 2014. Amgen denies that

the '302 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 249.

250. Amgen denies the allegations of paragraph 250.

251. Amgen denies the allegations of paragraph 251.

252. Amgen denies the allegations of paragraph 252.

253. Amgen denies the allegations of paragraph 253.

Count 41
(Declaratory Judgment of Infringement of the '302 Patent)

254. Amgen denies the allegations of paragraph 254.

255. Amgen denies the allegations of paragraph 255.

Count 42
(Infringement of the '196 Patent)

256. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

257. Amgen admits that U.S. Patent No. 8,710,196 ("the '196 patent"), a copy of which is attached as Exhibit V to the Complaint, issued on April 29, 2014. Amgen denies that the '196 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 257.

258. Amgen denies the allegations of paragraph 258.

259. Amgen denies the allegations of paragraph 259.

260. Amgen denies the allegations of paragraph 260.

261. Amgen denies the allegations of paragraph 261.

262. Amgen denies the allegations of paragraph 262.

Count 43
(Declaratory Judgment of Infringement of the '196 Patent)

263. Amgen denies the allegations of paragraph 263.

264. Amgen denies the allegations of paragraph 264.

Count 44
(Infringement of the '035 Patent)

265. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

266. Amgen admits that U.S. Patent No. 9,441,035 ("the '035 patent") issued and is attached as Exhibit W to the Complaint. Amgen denies that the '035 patent issued on September 13, 20035, the date that is alleged in paragraph 266. Amgen denies that the '035 patent was duly and legally issued. Amgen is unable to comprehend the allegations that the '035 patent was issued in violation of 35 U.S.C. § 271(a) by making and/or using ABP 215 in the United States, and on that basis denies those allegations. Amgen denies the remaining allegations of paragraph 266.

267. Amgen denies the allegations of paragraph 267.

268. Amgen denies the allegations of paragraph 268.

269. Amgen denies the allegations of paragraph 269.

270. Amgen denies the allegations of paragraph 270.

Count 45
(Declaratory Judgment of Infringement of the '035 Patent)

271. Amgen denies the allegations of paragraph 271.

272. Amgen denies the allegations of paragraph 272.

Count 46
(Infringement of the '809 Patent)

273. Amgen incorporates its responses to each of the preceding paragraphs as if fully

set forth herein.

274. Amgen admits that U.S. Patent No. 9,487,809 ("the '809 patent"), a copy of which is attached as Exhibit X to the Complaint, issued on November 8, 2016. Amgen denies that the '809 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 274.

275. Amgen denies the allegations of paragraph 275.

276. Amgen denies the allegations of paragraph 276.

277. Amgen denies the allegations of paragraph 277.

278. Amgen denies the allegations of paragraph 278.

279. Amgen denies the allegations of paragraph 279.

Count 47
(Declaratory Judgment of Infringement of the '809 Patent)

280. Amgen denies the allegations of paragraph 280.

281. Amgen denies the allegations of paragraph 281.

Count 48
(Declaratory Judgment of Infringement of the '672 Patent)

282. Amgen incorporates its responses to each of the preceding paragraphs as if fully set forth herein.

283. Amgen admits that U.S. Patent No. 9,795,672 ("the '672 patent") issued on October 24, 2017. Amgen denies that the '672 patent was duly and legally issued. Amgen denies the remaining allegations of paragraph 283.

284. The allegations of paragraph 284 are legal conclusions that require no response, and on that basis Amgen denies them.

285. The allegations of paragraph 285 are legal conclusions that require no response,

and on that basis Amgen denies them.

286. Amgen admits that on November 2, 2017, Genentech purported to provide, under 42 U.S.C. § 262(*l*)(7), a supplement to its purported list under 42 U.S.C. § 262(*l*)(3)(A) to include U.S. Patent No. 9,795,672, and at that time, Genentech provided a copy of U.S. Patent No. 9,795,672. Amgen admits that Amgen provided to Genentech, at least by email dated December 1, 2017, a detailed statement that satisfied any obligation Amgen had pursuant to 42 U.S.C. § 262(*l*)(7)(B) and § 262(*l*)(3)(B). Amgen denies the remaining allegations of paragraph 286.

287. Amgen admits that the FDA approved Amgen's BLA application for Mvasi™ (bevacizumab-awwb) on September 14, 2017. The remaining allegations of paragraph 287 are legal conclusions that require no response, and on that basis Amgen denies them.

288. Amgen denies the allegations of paragraph 288.

289. Amgen admits that claim 1 of the '672 patent includes the words "a method of treating cancer in a patient comprising administering to the patient an effective amount of bevacizumab." Amgen admits that MVASI is approved for the particular indications listed in Section 1 of the MVASI Label, which is titled "Indications and Usage." Amgen admits that Section 2 of the MVASI Label is titled "Dosage and Administration." Amgen denies the remaining allegations of paragraph 289.

290. Amgen admits that claim 1 of the '672 patent includes the words "wherein the patient has a grade III hypertensive event resulting from the bevacizumab administration." Amgen admits that Section 5.7 of the MVASI Label is titled "Hypertension." Amgen denies the remaining allegations of paragraph 290.

291. Amgen admits that claim 1 of the '672 patent includes the words "the method

further comprising administering to the patient an antihypertensive agent in an amount sufficient to manage the grade III hypertensive event." Amgen admits that Section 5.7 of the MVASI Label is titled "Hypertension." Amgen denies the remaining allegations of paragraph 291.

292. Amgen admits that Section 5.7 of the MVASI Label is titled "Hypertension." Amgen denies that the quoted language in the first sentence of paragraph 292 appears in claim 1 of the '672 patent. Amgen lacks knowledge or information sufficient to form a belief as to the truth of the allegations relating to "Sections 2,4" and on that basis denies them. Amgen denies the remaining allegations of paragraph 292.

293. Amgen denies the allegations of paragraph 293.

294. Amgen admits that on December 1, 2017, Amgen provided to Genentech a detailed statement satisfying any obligations Amgen may have had pursuant to 42 U.S.C. § 262(*l*)(7)(B) and § 262(*l*)(3)(B). Amgen denies the remaining allegations of paragraph 294.

295. Amgen denies the allegations of paragraph 295.

296. Amgen denies the allegations of paragraph 296.

297. Amgen denies the allegations of paragraph 297.

298. Amgen denies the allegations of paragraph 298.

299. Amgen denies the allegations of paragraph 299.

300. Amgen denies the allegations of paragraph 300.

ANSWER TO PRAYER FOR RELIEF

Plaintiffs' prayer for relief does not require a response. To the extent a response is required, Amgen denies that Plaintiffs are entitled to any remedy or relief.

AFFIRMATIVE DEFENSES

Without admitting or implying that Amgen bears the burden of proof or burden of

persuasion as to any of them, Amgen, on information and belief, asserts the following defenses:

FIRST AFFIRMATIVE DEFENSE
(Failure to State a Claim)

1. Plaintiffs' Complaint fails to state a claim upon which relief can be granted.

SECOND AFFIRMATIVE DEFENSE
(Lack of Subject Matter Jurisdiction)

2. Plaintiffs' Complaint fails to state a claim for which this Court has subject matter jurisdiction.

THIRD AFFIRMATIVE DEFENSE
(Invalidity)

3. The patents-in-suit, and each of the claims thereof, are invalid for failure to comply with one or more conditions of patentability set forth in 35 U.S.C. § 1, et. seq., including one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B), which are incorporated by reference as if fully set forth herein.

FOURTH AFFIRMATIVE DEFENSE
(No Infringement)

4. Amgen has not, does not, and will not directly or indirectly infringe, either literally or under the doctrine of equivalents, any valid and enforceable claim of the patents-in-suit, for at least the reasons set forth in Amgen's detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B), which are incorporated by reference as if fully set forth herein.

FIFTH AFFIRMATIVE DEFENSE
(Safe Harbor)

5. Amgen is exempt from liability under the safe harbor of 35 U.S.C. § 271(e)(1), including to the extent Plaintiffs claim that the manufacture and clinical use of ABP 215 is an act

of infringement.

SIXTH AFFIRMATIVE DEFENSE
(No Willfulness)

6. Amgen has not willfully infringed any claim of the patents-in-suit.

SEVENTH AFFIRMATIVE DEFENSE
(No Recovery of Costs)

7. Plaintiffs are barred by 35 U.S.C. § 288 from recovering any costs associated with this action.

EIGHTH AFFIRMATIVE DEFENSE
(No Exceptional Case)

8. Amgen's actions in defending this case do not give rise to an exceptional case under 35 U.S.C. § 285 or 35 U.S.C. § 271(e)(4).

NINTH AFFIRMATIVE DEFENSE
(No Equitable Relief)

9. Plaintiffs are not entitled to any preliminary or permanent equitable relief.

TENTH AFFIRMATIVE DEFENSE
(No Standing)

10. Plaintiffs lack standing to assert one or more patents-in-suit.

ELEVENTH AFFIRMATIVE DEFENSE
(BPCIA Compliance by Amgen)

11. Amgen has complied with the procedures of the BPCIA.

TWELFTH AFFIRMATIVE DEFENSE
(Waiver, Estoppel)

12. Plaintiffs' Complaint, and each of its purported causes of action, is barred in whole or in part by the doctrines of waiver and/or estoppel.

THIRTEENTH AFFIRMATIVE DEFENSE
(Failure to Mitigate)

13. Plaintiffs have failed to mitigate the harm they claim to have sustained, if any.

FOURTEENTH AFFIRMATIVE DEFENSE
(Unclean Hands)

14. Plaintiffs' Complaint, and each of its purported causes of action, is barred by Plaintiffs' unclean hands, in view of at least the reasons relating to Genentech's inequitable conduct.

FIFTEENTH AFFIRMATIVE DEFENSE
(Inequitable Conduct)

15. Plaintiffs' Complaint, and each of its purported causes of action, is barred by Plaintiffs' inequitable conduct. During the prosecution of the '213 patent, Genentech made misrepresentations and omissions material to patentability and did so with the specific intent to mislead or deceive the Patent Office.

16. Genentech deliberately misrepresented the teachings of U.S. Patent No. 5,530,101 ("the '101 patent") to the Patent Office in order to overcome a rejection based on that reference. Specifically, Genentech told the Examiner that the '101 patent does not use the Kabat numbering system, despite its repeated references to "numbering according to Kabat" and "the Kabat system."

17. Genentech also made deliberate misrepresentations and omissions regarding Queen 1989, including (i) falsely distinguishing Queen 1989 on the ground that it used "sequential numbering," as opposed to the Kabat numbering system; and (ii) providing information at the request of the Examiner that conspicuously omitted a key residue ("62L") disclosed in the prior art. Deceptive intent by Genentech is the single most reasonable inference to be drawn from the prosecution history and all other available evidence.

18. On November 17, 1993, Genentech filed its patent application with claims requiring substitutions at specific locations, including positions "62L" and "93H." On December

9, 1994, the Examiner issued a Non-Final Rejection, rejecting the claims as obvious under § 103 over EP 0239400, Queen 1989, Riechmann 1988.

19. On June 12, 1995, Genentech amended the pending claims and deleted references to amino acid position "62L."

20. Following a final rejection and an Examiner interview, the case was transferred to a different Examiner and a new non-final rejection issued on December 23, 1996. The new Examiner maintained all prior rejections and further rejected the pending claims as anticipated by the '101 patent.

21. In response to the non-final rejection, Genentech once again amended the pending claims on June 27, 1997, adding amino acid position "62L" back into the claims.

22. On October 7, 1997, Genentech argued in its remarks to the Patent Office that Queen 1989 and the '101 patent were distinguishable because they "use sequential numbering for the variable domain residues of the antibodies described in these references, whereas the claims of the instant application use Kabat numbering for the framework region residues." Genentech repeated the same argument later in the prosecution of the '213 patent to distinguish Queen 1989 and the '101 patent with specific reference to residue "93H":

> Applicants point out that – as explained earlier in prosecution – the substituted 93 FR residue in the cited references [Queen 1989 and the '101 patent] is not 93H 'utilizing the numbering system set forth in Kabat' (see page 13, line 33 through to line 22 on page 14 of the present application) as required by claims 115-117, 123 and 127 of the present application. In particular, as noted on page 6 of the amendment hand carried to the Office on 10/7/97, residue no. 93 in the heavy chain of the anti-Tac antibody in the cited references, is actually 89H utilizing the numbering system set forth in Kabat. The cited references use a sequential numbering system, rather than the Kabat numbering system claimed herein.

(*See* Applicant Remarks, dated Apr. 26, 2001, at 7.)

23. On December 11, 2001, the Examiner indicated during an interview that the pending claims were allowable.

24. Contrary to Genentech's representations to the Patent Office—namely, that the '101 patent does not use the Kabat numbering system—the '101 patent states: "Residues are numbered according to the Kabat system (E. A. Kabat et al., Sequences of Proteins of Immunological Interest (National Institutes of Health, Bethesda, Md.) (1987)." ('101 patent at 9:13–18.) In addition, the '101 patent expressly refers to "numbering according to Kabat, op. cit." with specific reference to position 93 in the heavy chain. (*See id.* at 15:17–37.) Moreover, Table 5 of the '101 patent refers to residue "H93," with explicit reference to numbering "according to the Kabat system," as shown below:

TABLE 5

Residues in the framework sequence showing contacts with residues in the hypervariable regions.

Residue No.[1]	Amino Acid	Contacting CDR residues[2]
Fd79		
L49	Lys	L50Y, L53N, L55E, H99D, H100Y
H93	Leu	H35S, H37V, H100CF
Fd138-80		
L36	His	L34V, L89Q
H27	Tyr	H32H, H34I
H30	Tyr	H32H, H53R
H48	Phe	H63F
H66	Lys	H63F
H67	Ala	H63F

1. The amino acid residues are numbered according to the Kabat system (E. A. Kabat et al., Sequences of Proteins of Immunological Interest, National Institutes of Health, Bethesda, MD (1987)): the first letter (H or L) stands for the heavy chain or light chain. The following number is the residue number. The last letter is the amino acid one letter code.
2. The hypervariable regions are defined according to Kabat: Light chain CDR1: residue 24–34; CDR2: 50–56; CDR3: 89–97. Heavy chain CDR1: 31–35; CDR2: 50–65; CDR3: 95–102.

25. In order to overcome the § 102 rejection based on the '101 patent, Genentech falsely represented to the Patent Office that the '101 patent used sequential numbering, while arguing that the "claims of the instant application use Kabat numbering for the framework region

residues." Genentech misrepresented the teachings of the '101 patent, despite clear and repeated references in the '101 patent to the Kabat numbering system. Absent Genentech's false and misleading distinction, the Examiner had no reason to withdraw the § 102 rejection based on the '101 patent.

26. Genentech also made deliberate and material misrepresentations and omissions regarding Queen 1989 during the prosecution of the '213 patent. Genentech distinguished Queen 1989 on the ground that it used "sequential numbering," as opposed to the Kabat numbering system. At the Examiner's request, Genentech submitted a comparison of the different numbering systems purportedly utilized in Queen 1989 and the pending claims.[1] The alignments provided by Genentech to the Examiner conspicuously omitted the "62L" residue in both numbering systems. As noted above, residue "62L" was recited in then-pending claims of the '213 patent, and Queen 1989 expressly discloses "residues at positions corresponding to . . . 47 and 62 of the light chain (Fig. 2)." (*See* Queen 1989 at 10032.) Importantly, Queen 1989 discloses residues in the Kabat numbering system and, in particular, residue "62 of the light chain."

SIXTEENTH AFFIRMATIVE DEFENSE
(Failure to Mark)

27. Plaintiffs are barred from recovering damages for any alleged patent infringement because Plaintiffs have made, offered for sale, or sold within the United States a patented article—Avastin®—without giving proper notice to the public that the same is patented. 35 U.S.C. § 287.

OTHER AFFIRMATIVE DEFENSES RESERVED

As Amgen's investigation is ongoing and discovery has not yet been completed, Amgen is without complete information regarding the existence or non-existence of other facts or acts

[1] *See* 10/7/97 Applicant Remarks at 6–10 ("As requested by the Examiner in the interview, alignments of heavy chain variable domain (Exhibit A) and light chain variable domain (Exhibit B) sequences of the 101 patent (including the sequences for the murine and humanized anti-Tac antibody of Queen *et al.*) with sequential and Kabat residue numbering is attached.").

that would constitute a defense to the purported causes of action in Plaintiffs' Complaint. Accordingly, Amgen reserves the right to assert any other defenses that discovery may reveal.

COUNTERCLAIMS

Amgen submits these counterclaims against Plaintiffs Genentech, Inc. and City of Hope:

THE PARTIES

1. Counterclaim-Plaintiff Amgen is a company organized and existing under the laws of the State of Delaware with its corporate headquarters at One Amgen Center Drive, Thousand Oaks, CA 91320.

2. As alleged in Plaintiffs' Complaint, Genentech, Inc. is a corporation organized under the laws of the State of Delaware, with its principal place of business at 1 DNA Way, South San Francisco, CA 94080.

3. As alleged in Plaintiffs' Complaint, City of Hope is a California not-for-profit organization, with its principal place of business at 1500 East Duarte Road, Duarte CA 91010.

JURISDICTION AND VENUE

4. Amgen's Counterclaims arise under the patent laws of the United States, Title 35 of the United States Code, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202. This Court has subject matter jurisdiction over Amgen's Counterclaims under 28 U.S.C. §§ 1331 and 1338.

5. Venue in this case is proper in this District because Genentech, Inc. is a Delaware corporation, and by virtue of Plaintiffs' filing of the Complaint in this District, which gave rise to these Counterclaims. Plaintiffs contend in their Complaint that venue is proper in this District.

FACTUAL BACKGROUND

6. Amgen has been a biotechnology pioneer since the 1980s, discovering, developing, manufacturing, and delivering innovative and important human therapeutic products. Since its inception, Amgen has focused on the development of biologic drugs. Unlike most traditional drugs that are synthesized chemically and have a known structure, biologic drugs are "complex mixtures that are not easily identified or characterized" and represent "the cutting-edge of biomedical research." FDA, What are "Biologics" Questions and Answers (Aug. 5, 2015), http://www.fda.gov/aboutfda/centersoffices/officeofmedicalproductsandtobacco/cber/ucm133077.htm. Because of their complexity, biologic drugs require substantially more effort, monetary resources and technical expertise to develop than traditional drugs that are synthesized chemically.

7. Over the last nearly 40 years and still today, Amgen's unparalleled experience and expertise in biologics research, development and manufacture has enabled it to develop biologic drugs to treat serious illnesses where there has previously been unmet medical needs and limited treatment options. These medicines have dramatically changed the treatment of disease and the lives of patients with these life-altering and life-threatening diseases. Since its inception, Amgen has developed a number of biologic medicines that have changed the standard of care, two of which have been named Product of the Year by Fortune Magazine and many which have received scientific and industry awards in recognition of Amgen's innovation. Over the last twenty years alone, Amgen received FDA approval of at least thirteen drugs that have addressed serious illnesses of patients.

8. In 2011, Amgen announced that it would develop and commercialize several oncology antibody biosimilar drugs, including biosimilar versions of Genentech's Avastin®, Herceptin®, and Rituxan®. In the announcement, Amgen recognized that "the development and

commercialization of biosimilar products will not follow a pure brand or generic model, and will require significant expertise, infrastructure, and investment to ensure safe, reliably supplied therapies for patients." Amgen and Watson Announce Collaboration to Develop and Commercialize Oncology Biosimilars, Media Release (Dec. 19, 2011), http://www.amgenbiosimilars.com/media/media-releases/2011/12/amgen-and-watson-announce-collaboration-to-develop-and-commercialize-oncology-biosimilars/.

9. Since its original announcement regarding biosimilars, Amgen has devoted significant time, effort, and substantial monetary resources to the development of Mvasi™. With its deep experience in biologics development and manufacture, Amgen developed materials that have been and will be used to make Mvasi™, including its proprietary cell line and cell culture used to produce the antibody that is the active ingredient of Mvasi™ ("Mvasi™ antibody"). Amgen also designed the manufacturing process and process controls that have been and will be used to make Mvasi™, including, among other things, developing the cell culture, harvest, and numerous purification steps to manufacture and purify the Mvasi™ antibody. Amgen also conducted numerous clinical studies in which it successfully tested Mvasi™ in humans. In the end, Amgen generated comprehensive analytical, pharmacokinetic, pharmacodynamic and clinical data that was submitted to the FDA as part of the FDA-approval process and that is the basis for the FDA's ultimate approval of Mvasi™.

Congress Enacts Legislation Creating a Regulatory Pathway for Biosimilar Biological Products

10. By amending the Public Health Service Act, the Patent Act, and the Declaratory Judgment Act, and through the Biologics Price Competition and Innovation Act of 2009 (the "BPCIA"), Congress created a new pathway for FDA review and approval of "biosimilar" biological products, as well as new mechanisms to resolve patent disputes that may arise with

respect to such products.

11. The BPCIA governs a type of drug called a biosimilar, which is a biologic product that is highly similar to a biologic product that has already been approved by the Food and Drug Administration (FDA)." *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1669 (2017).

12. The BPCIA sets forth an abbreviated pathway for FDA approval of biosimilars. 42 U.S.C. § 262(k). To obtain approval through the BPCIA's abbreviated process, an applicant must show that its biosimilar product is "highly similar" to the reference product and that there are no "clinically meaningful differences" between the two products in terms of "safety, purity, and potency." 42 U.S.C. § 262(k)(2). Under the BPCIA, an applicant may not submit an application until 4 years after the reference product is first licensed, and the FDA may not license a biosimilar until 12 years after the reference product is first licensed. 42 U.S.C. § 262(k)(7).

13. The reference product sponsor may have patents relating to the biological product, as well as therapeutic uses for and/or processes used to manufacture the biological product that it believes may be relevant to the biosimilar product. In recognition that there may be patent disputes between the reference product sponsor and the biosimilar applicant, "[t]he BPCIA sets forth a carefully calibrated scheme for preparing to adjudicate, and then adjudicating, claims of [patent] infringement." *Sandoz*, 137 S. Ct. at 1671 (citing 42 U.S.C. § 262(*l*)).

14. The BPCIA describes a process whereby the reference product sponsor and the biosimilar applicant exchange information in advance of a specific and statutorily prescribed action for patent infringement. *First*, the process begins when the applicant provides "a copy of the application submitted to the Secretary under subsection (k), and such other information that describes the process or processes used to manufacture the biological product that is the subject of such application." 42 U.S.C. § 262(*l*)(2)(A). In addition, the applicant "may provide to the

reference product sponsor additional information requested by or on behalf of the reference product sponsor." 42 U.S.C. § 262(*l*)(2)(B). *Second*, the BPCIA states that the reference product sponsor shall provide "a list of patents for which the reference product sponsor believes a claim of patent infringement could reasonably be asserted by the reference product sponsor . . . if a person not licensed by the reference product sponsor engaged in the making, using, offering to sell, selling, or importing into the United States of the biological product that is the subject of the subsection (k) application." 42 U.S.C. § 262(*l*)(3)(A). *Third*, the BPCIA requires the applicant to provide a "detailed statement that describes, on a claim by claim basis, the factual and legal basis of the opinion of the subsection (k) applicant that such patent is invalid, unenforceable, or will not be infringed by the commercial marketing of the biological product that is the subject of the subsection (k) application." 42 U.S.C. § 262(*l*)(3)(B)(ii)(I). Alternatively, the applicant can provide "a statement that the subsection (k) applicant does not intend to begin commercial marketing of the biological product before the date that such patent expires." 42 U.S.C. § 262(*l*)(3)(B)(ii)(II). *Last*, the BPCIA states that the reference product sponsor "shall provide to the subsection (k) applicant a detailed statement that describes, with respect to each patent described in subparagraph (B)(ii)(I), on a claim by claim basis, the factual and legal basis of the opinion of the reference product sponsor that such patent will be infringed by the commercial marketing of the biological product that is the subject of the subsection (k) application and a response to the statement concerning validity and enforceability provided under subparagraph (B)(ii)(I)." 42 U.S.C. § 262(*l*)(3)(C).

15. Following the information exchange, the BPCIA requires the reference product sponsor and the applicant to engage in "good faith negotiations to agree on which, if any, patents listed under paragraph (3) by the subsection (k) applicant or the reference product sponsor shall

be the subject of an action for patent infringement under paragraph (6) [of the statute]." 42 U.S.C. § 262(*l*)(4). If agreement cannot be reached, the statute provides for a mechanism of further exchanges to determine which patent(s) will be the subject of a paragraph (6) patent litigation. 42 U.S.C. § 262(*l*)(4)(B)-(5). While the procedure and timing depend on whether the reference product sponsor and the applicant can reach agreement, the process may result in a statutorily defined action for patent infringement. 42 U.S.C. § 262(*l*)(6).

16. Paragraph (*l*)(8) of the BPCIA states that "[t]he subsection (k) applicant shall provide notice to the reference product sponsor not later than 180 days before the date of the first commercial marketing of the biological product licensed under subsection (k)." 42 U.S.C. § 262(*l*)(8)(A). Once the applicant's notice of commercial marketing is received by the reference product sponsor, any limitation under the BPCIA on bringing an action under section 2201 of title 28 for a declaration of rights concerning patent infringement, validity and/or enforceability is lifted. 42 U.S.C. § 262(*l*)(9).

The Parties' Exchanges Following the Filing of Amgen's Subsection (k) Application for Approval of Its Biosimilar Product

17. According to the FDA's "Purple Book," Genentech's Avastin® brand of bevacizumab was first approved on February 26, 2004.

18. On November 14, 2016, Amgen filed its Biologics License Application ("BLA") for Mvasi™ pursuant to 42 U.S.C. § 262(k). Amgen's BLA was filed after the expiration of the 4 year and 12 year statutory periods provided by 42 U.S.C. § 262(k)(7). Amgen received notification from the FDA that its BLA had been accepted for review on January 4, 2017.

19. Genentech wrote a letter to Amgen following the FDA's acceptance of Amgen's BLA. In this letter, dated January 13, 2017, Genentech requested vaguely defined information relating to the processes used in the production of Mvasi™ "irrespective of whether it is

contained in the aBLA." The letter also purported to include "exemplary citations" to approximately 30 patents, including several which, upon information and belief, were not assigned or exclusively licensed to Genentech.

20. One week later, on January 20, 2017, Amgen timely sent to Genentech its disclosure pursuant to 42 U.S.C. § 262(*l*)(2)(A). Amgen's § 262(*l*)(2)(A) disclosure contained, *inter alia*, extensive information regarding the manufacturing processes used to make Mvasi™. In fact, Amgen provided Genentech more than a million pages of technical details and batch records describing, among other things, (i) the source, history, and generation of the cell substrate, (ii) the cell culture and harvest process, (iii) each and every purification process step, and (iv) the raw materials used during the manufacture of Mvasi™. In addition to the BLA, Amgen also provided on January 20, 2017 later-filed supplements that included further information describing the manufacture of Amgen's product –including an updated manufacturing schedule, a detailed schedule specifying each manufacturing unit operations, and testing sites, relating to Amgen's manufacture of Mvasi™.

21. Together with Amgen's § 262(*l*)(2)(A) disclosure, Amgen sent a letter to Genentech communicating Amgen's good-faith belief that its disclosure contained sufficiently detailed information regarding its biosimilar product and manufacturing processes, which "satisfie[d] Amgen's production obligations under 42 U.S.C. § 262(*l*)(2)(A) and enable[d] Genentech to undertake its obligations under 42 U.S.C. § 262(*l*)(3)(A)."

22. Thereafter, the parties exchanged additional correspondence. Genentech continued to insist that Amgen had an obligation to produce "all" documents relating to its manufacturing processes, regardless of whether the information was provided in or duplicative of the information already provided in Amgen's § 262(*l*)(2)(A) disclosure.

23. Amgen communicated its willingness to reasonably cooperate with Genentech in response to specific requests for non-cumulative information if Genentech believed it needed additional information to assist it in fulfilling its § 262(*l*)(3)(A) duties. Amgen wrote the following to Genentech in a letter dated January 25, 2017:

> Amgen believes that its disclosure contains the information sufficient for Genentech to determine for which patents it can reasonably assert a claim of patent infringement pursuant to § 262(*l*)(3)(A). If, however, in your evaluation of Amgen's disclosure you believe that additional targeted information not already provided in Amgen's § 262(*l*)(2)(A) disclosure would be helpful to Genentech in making its determination under § 262(*l*)(3)(A), we would be happy to discuss the production of such information if it is reasonably available to Amgen.

24. Instead of making any requests for targeted information as Amgen invited Genentech to do, Genentech filed suit against Amgen on February 15, 2017, in the District of Delaware, alleging that Amgen had violated the BPCIA, including alleged violations of 42 U.S.C. § 262(*l*)(2)(A). The Court dismissed Genentech's Complaint two weeks later. In its March 1, 2017 Order, the Court provided Genentech with 45 days to file an amended Complaint alleging patent infringement pursuant to 42 U.S.C. § 262(*l*)(9)(C) if Genentech, in fact, believed that Amgen had violated the BPCIA. As discussed further below, Genentech did not file an amended complaint.

25. Meanwhile, on March 24, 2017, Genentech provided Amgen with its list of patents purporting to comply with 42 U.S.C. § 262(*l*)(3)(A) ("the (3)(A) list") that Genentech "believe[d] could reasonably be asserted against Amgen's proposed ABP 215 product based upon a review of the product's aBLA filing." Genentech's (3)(A) list included a total of 27 patents, including the patents-in-suit.

26. On April 14, 2017, Genentech told the Court in the Delaware action that Genentech would not be filing an amended Complaint because "[w]e believe it is more efficient for the Court and the parties to address both the patent merits and Amgen's continued noncompliance with its statutory production obligations . . . after the Supreme Court's expected decision in June in *Amgen v. Sandoz*." Genentech, however, failed to inform the Court that it had already provided Amgen with its (3)(A) list. The Supreme Court subsequently issued its decision in the *Amgen v. Sandoz* case on June 12, 2017. Following the decision, Genentech again did not file a declaratory judgment action for patent infringement pursuant to 42 U.S.C. § 262(*l*)(9)(C), which, according to the Supreme Court, "excludes all other federal remedies, including injunctive relief," for any alleged noncompliance with § 262(*l*)(2)(A).

27. Amgen fully responded to Genentech's (3)(A) list by providing Genentech a statement pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(II), and further providing Genentech, pursuant to 42 U.S.C. § 262(*l*)(3)(B)(ii)(I), a 778-page detailed statement that describes on a claim-by-claim basis the factual and legal bases for Amgen's opinion that patents included on Genentech's (3)(A) list are not infringed and/or are invalid or unenforceable (Amgen's "(3)(B) statement"). Amgen annotated its non-infringement positions with detailed citations to its BLA. Amgen timely provided its detailed statement to Genentech on May 23, 2017.

28. On July 22, 2017, Amgen received Genentech's alleged statement pursuant to § 262(*l*)(3)(C) (Genentech's "(3)(C) statement"). Even though the BPCIA required Genentech to provide, among other things, "on a claim by claim basis, the factual and legal basis of the opinion of the reference product sponsor that [each] patent [identified in Amgen's (3)(B) statement] will be infringed by the commercial marketing of the biological product that is the subject of the subsection (k) application," Genentech did not address all of the patents identified

in Amgen's (3)(B) statement. Specifically, Genentech did not provide any response to Amgen's detailed statement for the '553 patent or the '516 patent, or claim 4 of the '017 patent. In addition, Genentech provided no factual or legal basis to support a claim of infringement for 11 patents, and 2 claims of a twelfth patent, on its (3)(A) list, relying instead on its own unsupported assertion that Amgen violated § 262(*l*)(2)(A) to "justify" its position that Amgen's commercial marketing of Mvasi™ would somehow infringe Genentech's patents.

29. On September 6, 2017, Amgen wrote to Genentech regarding its non-compliance with § 262(*l*)(3)(C). For example, Amgen explained that "Genentech's § 262(*l*)(3)(C) statement fails to provide the requisite detailed factual and legal basis for its infringement contentions when . . . Genentech relies on Amgen's alleged § 262(*l*)(2)(A) violation." Amgen also explained that, according to recent Supreme Court precedent, any purported or perceived violation of § 262(*l*)(2)(A) is not an act of patent infringement and, therefore, cannot serve as the basis for Genentech's continued assertion of 11 patents and 2 claims of a twelfth patent. *See Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1674 (2017) ("Failing to disclose the application and manufacturing information under § 262(l)(2)(A) does not [constitute an act of infringement under 35 U.S.C. § 271(e)(2)].") In view of Genentech's failure to properly address the 13 patents and 3 claims described in Paragraph 27 above, Amgen requested that Genentech confirm that it would remove them from its (3)(A) list, or otherwise covenant that it would not assert them with respect to Mvasi™.

30. Genentech responded on September 8, 2017. In its letter, Genentech refused to withdraw any patents or claims from its (3)(A) list as previously requested by Amgen. Genentech also stated that, in spite of the issues raised regarding its compliance with § 262(*l*)(3)(C), "[w]e believe those contentions suffice."

31. On September 14, 2017, the parties held an in-person meeting in Los Angeles, California to engage in good-faith negotiations under § 262(*l*)(4) regarding which patents on Genentech's (3)(A) list shall be the subject of an action for patent infringement under § 262(*l*)(6). Genentech again told Amgen that it refused to withdraw any patents or claims from its (3)(A) list.

32. On the same day, the FDA approved Amgen's Mvasi™ as a biosimilar to Genentech's Avastin®, making it the first biosimilar approved in the United States for the treatment of cancer.

33. On September 29, 2017, the parties' negotiations under § 262(*l*)(4) ended without an agreement on a final and complete list of which, if any, patents on Genentech's (3)(A) list shall be the subject of an action for patent infringement under § 262(*l*)(6).

34. On October 6, 2017, Amgen sent a letter to Genentech providing notice pursuant to 42 U.S.C. § 262(*l*)(8)(A) that "it will commence commercial marketing of Mvasi™ (a/k/a ABP215) no earlier than 180 days from the date of this letter."

35. On October 6, 2017, Amgen filed a lawsuit in the Central District of California seeking declaratory judgment as to all patents identified on Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(A).

36. On October 9, 2017, Amgen sent a letter to Genentech providing notice pursuant to 42 U.S.C. § 262(*l*)(5)(A) that the number of patents that it believed should be the subject of an action for patent infringement under 42 U.S.C. § 262(*l*)(6) was 27.

THE PATENTS-IN-SUIT

37. U.S. Patent No. 6,054,297, titled "Humanized Antibodies and Methods for Making Them," issued on April 25, 2000. Upon information and belief, Genentech owns the

'297 patent. The earliest possible priority date for the '297 patent is June 14, 1991. Upon information and belief, the '297 patent expired on February 26, 2018.

38. U.S. Patent No. 6,121,428, titled "Protein Recovery," issued on September 19, 2000. Upon information and belief, Genentech owns the '428 patent. The earliest possible priority date for the '428 patent is June 13, 1997. Upon information and belief, the '428 patent expires on June 12, 2018.

39. U.S. Patent No. 6,242,177, titled "Methods and Compositions for Secretion of Heterologous Polypeptides," issued on June 5, 2001. Upon information and belief, Genentech owns the '177 patent. The earliest possible priority date for the '177 patent is March 1, 1995. Upon information and belief, the '177 patent expires on June 5, 2018.

40. U.S. Patent No. 6,331,415, titled "Methods of Producing Immunoglobulins, Vectors and Transformed Host Cells for Use Therein," issued on December 18, 2001. Upon information and belief, Genentech and City of Hope co-own the '415 patent. The earliest possible priority date for the '415 patent is April 8, 1983. Upon information and belief, the '415 patent expires on December 18, 2018.

41. U.S. Patent No. 6,407,213, titled "Method for Making Humanized Antibodies," issued on June 18, 2002. Upon information and belief, Genentech owns the '213 patent. The earliest possible priority date for the '213 patent is June 14, 1991. Upon information and belief, the '213 patent expires on June 18, 2019.

42. U.S. Patent No. 6,417,335, titled "Protein Purification," issued on July 9, 2002. Upon information and belief, Genentech owns the '335 patent. The earliest possible priority date for the '335 patent is May 6, 1998. Upon information and belief, the '213 patent expires on May 3, 2019.

43. U.S. Patent No. 6,586,206, titled "Methods for Making Recombinant Proteins Using Apoptosis Inhibitors," issued on July 1, 2003. Upon information and belief, Genentech owns the '206 patent. The earliest possible priority date for the '206 patent is September 27, 1999. Upon information and belief, the '206 patent expires on September 25, 2020.

44. U.S. Patent No. 6,610,516, titled "Cell Culture Process," issued on August 26, 2003. Upon information and belief, Genentech owns the '516 patent. The earliest possible priority date for the '516 patent is April 26, 1999. Upon information and belief, the '516 patent expires on April 21, 2020.

45. U.S. Patent No. 6,620,918, titled "Separation of Polypeptide Monomers," issued on September 16, 2003. Upon information and belief, Genentech owns the '918 patent. The earliest possible priority date for the '918 patent is June 1, 1998. Upon information and belief, the '918 patent expires on May 26, 2019.

46. U.S. Patent No. 6,870,034, titled "Protein Purification," issued on March 22, 2005. Upon information and belief, Genentech owns the '034 patent. The earliest possible priority date for the '034 patent is February 5, 2002. Upon information and belief, the '034 patent expires on February 3, 2023.

47. U.S. Patent No. 6,884,879, titled "Anti-VEGF Antibodies," issued on April 26, 2005. Upon information and belief, Genentech owns the '879 patent. The earliest possible priority date of the '879 patent is August 7, 1997. Upon information and belief, the '879 patent expired on August 7, 2017.

48. U.S. Patent No. 7,060,269, titled "Anti-VEGF Antibodies," issued on June 13, 2006. Upon information and belief, Genentech owns the '269 patent. The earliest possible

priority date of the '269 patent is August 6, 1997. Upon information and belief, the '269 patent expires on July 4, 2019. Genentech contends that the '269 patent covers bevacizumab.

49. U.S. Patent No. 7,169,901, titled "Anti-VEGF Antibodies," issued on January 30, 2007. Upon information and belief, Genentech owns the '901 patent. The earliest possible priority date of the '901 patent is April 7, 1997. Upon information and belief, the '901 patent expires on March 23, 2019. Genentech contends that the '901 patent covers bevacizumab.

50. U.S. Patent No. 7,297,334, titled "Anti-VEGF Antibodies," issued on November 20, 2007. Upon information and belief, Genentech owns the '334 patent. The earliest possible priority date of the '334 patent is August 7, 1997. Upon information and belief, the '334 patent expired on August 7, 2017.

51. U.S. Patent No. 7,323,553, titled "Non-Affinity Purification of Proteins," issued on January 29, 2008. Upon information and belief, Genentech owns the '553 patent. The earliest possible priority date for the '553 patent is April 26, 2002. Upon information and belief, the '553 patent expires on April 25, 2023.

52. U.S. Patent No. 7,375,193, titled "Anti-VEGF Antibodies," issued on May 20, 2008. Upon information and belief, Genentech owns the '193 patent. The earliest possible priority date of the '193 patent is August 7, 1997. Upon information and belief, the '193 patent expired on August 7, 2017.

53. U.S. Patent No. 7,622,115, titled "Treatment with Anti-VEGF Antibodies," issued on November 24, 2009. Upon information and belief, Genentech owns the '115 patent. The earliest possible priority date for the '115 patent is May 30, 2003. Upon information and belief, the '115 patent expires on May 28, 2024.

54. U.S. Patent No. 7,807,799, titled "Reducing Protein A Leaching During Protein A Affinity Chromatography," issued on October 5, 2010. Upon information and belief, Genentech owns the '799 patent. The earliest possible priority date for the '799 patent is July 28, 2003. Upon information and belief, the '799 patent expires on June 24, 2024.

55. U.S. Patent No. 7,923,221, titled "Methods of Making Antibody Heavy and Light Chains Having Specificity for a Desired Antigen," issued on April 12, 2011. Upon information and belief, Genentech and City of Hope co-own the '221 patent. The earliest possible priority date of the '221 patent is April 8, 1983. Upon information and belief, the '221 patent expires on December 18, 2018.

56. U.S. Patent No. 8,044,017, titled "Protein Purification," issued on October 25, 2011. Upon information and belief, Genentech owns the '017 patent. The earliest possible priority date for the '017 patent is September 11, 2002. Upon information and belief, the '017 patent expires on March 28, 2026.

57. U.S. Patent No. 8,460,895, titled "Method for Producing Recombinant Proteins with a Constant Content of pCO_2 in the Medium," issued on June 11, 2013. Upon information and belief, the '895 patent is owned by Hoffman-La Roche, Inc. with all substantial rights exclusively licensed to Genentech. The earliest possible priority date for the '895 patent is March 12, 2008. Upon information and belief, the '895 patent expires on August 8, 2029.

58. U.S. Patent No. 8,512,983, titled "Production of Proteins in Glutamine-Free Cell Culture Media," issued on August 20, 2013. Upon information and belief, the '983 patent is owned by F. Hoffmann-La Roche AG with all substantial rights exclusively licensed to Genentech. The earliest possible priority date for the '983 patent is August 11, 2009. Upon information and belief, the '983 patent expires on January 4, 2031.

59. U.S. Patent No. 8,574,869, titled "Prevention of Disulfide Bond Reduction During Recombinant Production of Polypeptides," issued on November 5, 2013. Upon information and belief, Genentech owns the '869 patent. The earliest possible priority date for the '869 patent is July 9, 2007. Upon information and belief, the '869 patent expires on July 8, 2028.

60. U.S. Patent No. 8,633,302, titled "Variable Tangential Flow Filtration," issued on January 21, 2014. Upon information and belief, the '302 patent is owned Hoffman-La Roche, Inc. with all substantial rights exclusively licensed to Genentech. The earliest possible priority date for the '302 patent is July 17, 2007. Upon information and belief, the '302 patent expires on July 23, 2030.

61. U.S. Patent No. 8,710,196, titled "Protein Purification," issued on April 29, 2014. Upon information and belief, Genentech owns the '196 patent. The earliest possible priority date for the '196 patent is September 11, 2002. Upon information and belief, the '196 patent expires on September 10, 2023.

62. U.S. Patent No. 9,441,035, titled "Cell Culture Media and Methods of Antibody Production," issued on September 13, 2016. Upon information and belief, Genentech owns the '035 patent. The earliest possible priority date for the '035 patent is March 15, 2013. Upon information and belief, the '035 patent expires on April 23, 2034.

63. U.S. Patent No. 9,487,809, titled "Decreasing Lactate Level and Increasing Polypeptide Production by Downregulating the Expression of Lactate Dehydrogenase and Pyruvate Dehydrogenase Kinase," issued on November 8, 2016. Upon information and belief, Genentech owns the '809 patent. The earliest possible priority date for the '809 patent is May 28, 2010. Upon information and belief, the '809 patent expires on January 14, 2032.

64. U.S. Patent No. 9,795,672, titled "Treatment With Anti-VEGF Antibodies," issued on October 24, 2017. Upon information and belief, Genentech owns the '672 patent. The earliest possible priority date for the '672 patent is May 30, 2003. Upon information and belief, the '672 patent expires on May 28, 2024.

Count 1
Non-Infringement and Invalidity of U.S. Patent No. 6,054,297

65. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

66. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,054,297 ("the '297 patent").

67. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '297 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

68. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '297 patent.

69. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive

infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

70. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '297 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

71. The claims of the '297 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '297 patent are invalid under 35 U.S.C. §§ 102 and/or 103, at least over U.S. Patent No. 5,530,101 or Queen *et al.*,[2] alone or in combination with Kabat *et al.*,[3] EP0403156, WO90/07861, Hudziak *et al.*,[4] Chothia and Lest,[5] and/or Chothia *et al.*[6] Additionally, one or more of the claims of the '297 patent are invalid under 35 U.S.C. § 112 because, for example, the '297 patent fails to enable and

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[2] Queen *et al.*, "A humanized antibody that binds to the interleukin 2 receptor," Proc. Natl. Acad. Sci., Vol. 86, 10029-10033 (1989)

[3] Kabat *et al.*, "Sequences of Proteins of Immunological Interest," 4th, Bethesda, MD: National Institutes of Health, pp. iii-xxvii, 41-176 (1987)

[4] Hudziak, R. *et al.*, "*p185^{HER2} monoclonal antibody has antiproliferative effects in vitro and sensitizes human breast tumor cells to tumor necrosis factor*," Mol. Cell. Biol., Vol. 9, No. 3, 1165-1172 (1989)

[5] Chothia *et al.*, "*Canonical structures for hypervariable regions of immunoglobulins*," J. MOL. BIOL., Vol. 196, 901-917 (1987)

[6] Chothia *et al.*, "*Conformations of immunoglobulin hypervariable regions*," Nature, Vol. 342, 877-883 (1989)

provide adequate written description for "[a] method for making a humanized antibody comprising non-human, import Complementarity Determining Region (CDR) amino acid residues and human Framework Region (FR) amino acid residues, comprising the steps of: (a) obtaining the amino acid sequences of an import variable domain and of a V_H subgroup III consensus human variable domain; (b) identifying CDR amino acid sequences in the import and the human variable domain sequences; (c) substituting import CDRs for the corresponding human CDRs; (d) aligning the amino acid sequences of a FR of the import antibody and the corresponding FR of the consensus variable domain; (e) identifying import antibody FR residues in the aligned FR sequences that are non-homologous to the corresponding consensus variable domain residues; (f) determining if the non-homologous import amino acid residue is expected to have at least one of the following effects: (1) non-covalently binds antigen directly; (2) interacts with a CDR; or (3) participates in the V_L -V_H interface; (g) for any non-homologous import antibody amino acid residue which is expected to have at least one of these effects, substituting that residue for the corresponding amino acid residue in the consensus variable domain FR sequence; and (h) preparing a humanized antibody which binds antigen, wherein the humanized antibody comprises an amino acid sequence determined according to the above steps."

72. Amgen is entitled to a judgment that the claims of the '297 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 2
Non-Infringement and Invalidity of U.S. Patent No. 6,121,428

73. Amgen restates and incorporates by reference the allegations in the preceding

paragraphs as if fully set forth herein.

74. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,121,428 ("the '428 patent").

75. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '428 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

76. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '428 patent.

77. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

78. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '428 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of

information under a federal law that regulates the manufacture, use, or sale of drugs.

79. The claims of the '428 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '428 patent are invalid under 35 U.S.C. §§ 102 and/or 103, at least in view of EP 0,345,549, Gagnon,[7] Garg *et al.*,[8] Birch *et al.*,[9] Freitag *et al.*,[10] U.S. Patent No. 5,429,746, or U.S. Patent No. 5,470,954, alone or in combination with one or more of WO 93/02098, Sartobind *et al.*,[11] and/or Sartorious *et al.*[12] Additionally, one or more of the claims of the '428 patent are invalid under 35 U.S.C. § 112 because, for example, the '428 patent fails to enable and provide adequate written description for "[a] method for recovering a polypeptide comprising: (a) exposing a composition comprising a polypeptide to a reagent which binds to, or modifies, the polypeptide, wherein the reagent is immobilized on a solid phase; and then (b) passing an effluent comprising the polypeptide eluted from or modified by the immobilized reagent, and any reagent leached from the solid phase, through a filter beating a charge which is opposite to the charge of the reagent in and at the pH

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[7] Gagnon P, *Purification Tools for Monoclonal Antibodies, Chapter 9: Protein A Affinity Chromatography*, VALIDATED BIOSYSTEMS (1996)

[8] Garg VK *et al.*, *Purification and Production of Therapeutic Grade Proteins*, in PURIFICATION AND ANALYSIS OF RECOMBINANT PROTEINS (Seetharam R and Sharma SK, eds.) (1991)

[9] Birch JR *et al.*, *Methods for Antibody Purification*, in MONOCLONAL ANTIBODIES: PRINCIPLES AND APPLICATIONS, Wiley-Liss (1995)

[10] Freitag R et al., Controlled Mixed-Mode Interaction Chromatography on Membrane Adsorbers, 728 J. Chromatography A 129–137 (1996)

[11] Sartobind Minisart Product Insert

[12] Sartorious, *The new mircroporous membrane adsorbers S15, Q15, S100 and Q100*, Product Insert

of, the composition, so as to remove leached reagent from the effluent."

80. Amgen is entitled to a judgment that the claims of the '428 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 3
Non-Infringement and Invalidity of U.S. Patent No. 6,242,177

81. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

82. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,242,177 ("the '177 patent").

83. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '177 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

84. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '177 patent.

85. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were

"moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

86. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '177 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

87. The claims of the '177 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '177 patent are invalid under 35 U.S.C. §§ 102 and/or 103, at least in view of Fujimoto *et al.*,[13] U.S. Patent No. 4,923,808, or EP 0,177,343 B1, alone or in combination thereof. Additionally, one or more of the claims of the '177 patent are invalid under 35 U.S.C. § 112 because, for example, the '177 patent fails to enable and provide adequate written description for "[a] method of optimizing secretion of a heterologous polypeptide of interest in a cell comprising comparing the levels of expression of the polypeptide under control of a set of nucleic acid variants of a translation initiation region, wherein the set of variants represents a range of translational strengths, and determining the optimal translational strength for production of mature polypeptide, wherein the

[13] Fujimoto K *et al.*, *Expression and Secretion of Human Epidermal Growth Factor by Escherichia Coli Using Enterotoxin Signal Sequences*, 8 J. BIOTECHNOL. 77–86 (1988)

optimal translational strength is less than the translational strength of the wild-type translation initiation region."

88. Amgen is entitled to a judgment that the claims of the '177 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 4
Non-Infringement and Invalidity of U.S. Patent No. 6,331,415

89. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

90. Plaintiffs have alleged that Genentech and City of Hope co-own U.S. Patent No. 6,331,415 ("the '415 patent").

91. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '415 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

92. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '415 patent.

93. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed

by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

94. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '415 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

95. The claims of the '415 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '415 patent are invalid under 35 U.S.C. §103, at least over U.S. Patent No. 4,495,280 to Southern *et al.*,[14] alone or in combination with one or more of Riggs *et al.*,[15] Villa-Komaroff *et al.*,[16] Kitano *et al.*,[17]

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[14] Southern P.J. *et al.*, *Transformation of Mammalian Cells to Antibiotic Resistance with a Bacterial Gene Under Control of the SV40 Early Region Promoter*, 1 JOURNAL OF MOLECULAR AND APPLIED GENETICS 327-41 (1982)

[15] Riggs A.D. *et al.*, *Synthetic DNA and Medicine*, 31 AMERICAN JOURNAL OF HUMAN GENETICS 531-38 (1979)

[16] Villa-Komaroff L. *et al.*, *A Bacterial Clone Synthesizing Proinsulin*, 75 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 3727-31 (1978)

[17] Kitano K. *et al.*, Escherichia coli *Mutants Tolerant to Beta-Lactam Antibiotics*, 140 JOURNAL OF BACTERIOLOGY 955-63 (1979)

Bergman *et al.*,[18] Bobrzecka *et al.*,[19] Accolla *et al.*,[20] and/or Nakane *et al.*[21] Additionally, one or more of the claims of the '415 patent are invalid under 35 U.S.C. § 112 because, for example, the '415 patent fails to enable and provide adequate written description for "[a] process for producing an immunoglobulin molecule or an immunologically functional immunoglobulin fragment comprising at least the variable domains of the immunoglobulin heavy and light chains, in a single host cell, comprising the steps of: (i) transforming said single host cell with a first DNA sequence encoding at least the variable domain of the immunoglobulin heavy chain and a second DNA sequence encoding at least the variable domain of the immunoglobulin light chain, and (ii) independently expressing said first DNA sequence and said second DNA sequence so that said immunoglobulin heavy and light chains are produced as separate molecules in said transformed single host cell."

96. Amgen is entitled to a judgment that the claims of the '415 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

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[18] Bergman L.W. *et al.*, *Formation of Intermolecular Disulfide Bonds on Nascent Immunoglobulin Polypeptides*, 254 JOURNAL OF BIOLOGICAL CHEMISTRY 5690-94 (1979)

[19] Bobrzecka K *et al.*, *The Method of Controlled Rearrangement of Protein Disulphides and its Use for Synthesis of Chimeric Immunoglobulin G*, 2 IMMUNOLOGY LETTERS 151-55 (1980)

[20] Accolla R.S. *et al.*, *Monoclonal Antibodies Specific for Carcinoembryonic Antigen and Produced by Two Hybrid Cell Lines*, 77 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 563-66 (1980)

[21] Nakane P.K. *et al.*, *Peroxidase-Labeled Antibody: A New Method of Conjugation*, 22 JOURNAL OF HISTOCHEMISTRY AND CYTOCHEMISTRY 1084-91 (1974)

Count 5
Non-Infringement and Invalidity of U.S. Patent No. 6,407,213

97. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

98. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,407,213 ("the '213 patent").

99. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '213 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

100. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '213 patent.

101. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

102. The claims of the '213 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103,

and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

103. Amgen is entitled to a judgment that the claims of the '213 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 6
Non-Infringement and Invalidity of U.S. Patent No. 6,417,335

104. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

105. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,417,335 ("the '335 patent").

106. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '335 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

107. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '335 patent.

108. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed

by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

109. The claims of the '335 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

110. Amgen is entitled to a judgment that the claims of the '335 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 7
Non-Infringement and Invalidity of U.S. Patent No. 6,586,206

111. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

112. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,586,206 ("the '206 patent").

113. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '206 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

114. Amgen has not directly or indirectly infringed, and will not directly or indirectly

infringe, any valid and enforceable claim of the '206 patent.

115. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

116. The claims of the '206 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

117. Amgen is entitled to a judgment that the claims of the '206 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 8
Non-Infringement and Invalidity of U.S. Patent No. 6,610,516

118. Amgen restates and incorporates by reference the allegations in the preceding

paragraphs as if fully set forth herein.

119. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,610,516 ("the '516 patent").

120. A case or controversy exists because, among other things, Plaintiffs have expressed their belief that a claim of patent infringement of the '516 patent could reasonably be asserted against Amgen by identifying the '516 patent on their 42 U.S.C. § 262(*l*)(3)(A) list, and subsequently refusing to remove the '516 patent from their 42 U.S.C. § 262(*l*)(3)(A) list or to otherwise remove the existing case or controversy surrounding the '516 patent.

121. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '516 patent.

122. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

123. The claims of the '516 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103,

and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

124. Amgen is entitled to a judgment that the claims of the '516 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 9
Non-Infringement and Invalidity of U.S. Patent No. 6,620,918

125. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

126. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,620,918 ("the '918 patent").

127. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '918 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

128. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '918 patent.

129. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed

by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

130. The claims of the '918 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

131. Amgen is entitled to a judgment that the claims of the '918 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 10
Non-Infringement and Invalidity of U.S. Patent No. 6,870,034

132. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

133. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,870,034 ("the '034 patent").

134. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '034 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

135. Amgen has not directly or indirectly infringed, and will not directly or indirectly

infringe, any valid and enforceable claim of the '034 patent.

136. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

137. The claims of the '034 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

138. Amgen is entitled to a judgment that the claims of the '034 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 11
Non-Infringement and Invalidity of U.S. Patent No. 6,884,879

139. Amgen restates and incorporates by reference the allegations in the preceding

paragraphs as if fully set forth herein.

140. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 6,884,879 ("the '879 patent").

141. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '879 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

142. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '879 patent.

143. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

144. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '879 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of

information under a federal law that regulates the manufacture, use, or sale of drugs.

145. The claims of the '879 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '879 patent are invalid under 35 U.S.C. § 103, at least in view of Kim *et al.*[22] and/or WO 96/30046, alone or in combination with Carter (I) *et al.*,[23] Carter (II) *et al.*,[24] Xiang *et al.*,[25] and/or U.S. Patent No. 5,530,101. Additionally, one or more of the claims of the '879 patent are invalid under 35 U.S.C. § 112 because, for example, the '879 patent fails to enable and provide adequate written description for "[i]solated nucleic acid encoding a humanized variant of a parent anti-VEGF antibody which parent antibody comprises non-human variable domains, wherein said humanized variant binds human VEGF and comprises the following heavy chain Complementary Determining Region (CDR) amino acid sequences: SEQ ID NO:128 as CDRH1, SEQ ID NO:2 as CDRH2 and SEQ ID NO:129 as CDRH3."

146. Amgen is entitled to a judgment that the claims of the '879 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in

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[22] Kim *et al.*, *The vascular endothelial growth factor proteins: identification of biologically relevant regions by neutralizing monoclonal antibodies*, Growth Factors, Vol. 7, 53-64 (1992)

[23] Carter *et al.*, *Humanization of an anti-p185^{HER2} antibody for human cancer therapy*, 89 Proc. Natl. Acad. Sci., 4285-4289 (1992)

[24] Carter *et al.*, *High level Escherichia coli expression and production of a bivalent humanized antibody fragment*, 10 Biotechnology, 163-167 (1992)

[25] Xiang *et al.*, *Genetic engineering in mouse/human chimeric antibody*, Immunol., Vol. 75, 209-216 (1992)

Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 12
Non-Infringement and Invalidity of U.S. Patent No. 7,060,269

147. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

148. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,060,269 ("the '269 patent").

149. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '269 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

150. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '269 patent.

151. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

152. The claims of the '269 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

153. Amgen is entitled to a judgment that the claims of the '269 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 13
Non-Infringement and Invalidity of U.S. Patent No. 7,169,901

154. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

155. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,169,901 ("the '901 patent").

156. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '901 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

157. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '901 patent.

158. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B).

According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

159. The claims of the '901 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

160. Amgen is entitled to a judgment that the claims of the '901 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 14
Non-Infringement and Invalidity of U.S. Patent No. 7,297,334

161. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

162. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,297,334 ("the '334 patent").

163. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '334 patent, as set forth in Plaintiffs'

disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

164. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '334 patent.

165. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

166. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '334 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

167. The claims of the '334 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '334 patent are

invalid under 35 U.S.C. § 103, at least in view of Kim *et al.*[26] and/or WO 96/30046, alone or in combination with Carter (I) *et al.*,[27] Carter (II) *et al.*,[28] Xiang *et al.*,[29] and/or U.S. Patent No. 5,530,101. Additionally, one or more of the claims of the '334 patent are invalid under 35 U.S.C. § 112 because, for example, the '334 patent fails to enable and provide adequate written description for "a method for inhibiting VEGF-induced angiogenesis in a subject, comprising administering to said subject an effective amount of a humanized anti-VEGF antibody which binds human VEGF with a K_d value of no more than about 1×10^{-8}M, said humanized anti-VEGF antibody having a heavy chain variable domain comprising the following heavy chain complementarity determining region (CDR) amino acid sequences: CDRH1(GYX_1FTX_2YGMN, wherein X_1 is T or D and X_2 is N or H; SEQ ID NO:128), CDRH2 (WINTYTGEPTYAADFKR; SEQ ID NO:2) and CDRH3 ($YPX_1YYGX_2SHWYFDV$, wherein X_1 is Y or H and X_2 is S or T; SEQ ID NO:129) and a light chain variable domain comprising the following light chain CDR amino acid sequences: CDRL1 (SASQDISNYLN; SEQ ID NO:4), CDRL2 (FTSSLHS; SEQ ID NO:5) and CDRL3 (QQYSTVPWT; SEQ ID NO:6)."

168. Amgen is entitled to a judgment that the claims of the '334 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in

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[26] Kim *et al.*, *The vascular endothelial growth factor proteins: identification of biologically relevant regions by neutralizing monoclonal antibodies*, Growth Factors, Vol. 7, 53-64 (1992)

[27] Carter *et al.*, *Humanization of an anti-p185^{HER2} antibody for human cancer therapy*, 89 Proc. Natl. Acad. Sci., 4285-4289 (1992)

[28] Carter *et al.*, *High level Escherichia coli expression and production of a bivalent humanized antibody fragment*, 10 Biotechnology, 163-167 (1992)

[29] Xiang *et al.*, *Genetic engineering in mouse/human chimeric antibody*, Immunol., Vol. 75, 209-216 (1992)

Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 15
Non-Infringement and Invalidity of U.S. Patent No. 7,323,553

169. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

170. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,323,553 ("the '553 patent").

171. A case or controversy exists because, among other things, Plaintiffs have expressed their belief that a claim of patent infringement of the '553 patent could reasonably be asserted against Amgen by identifying the '553 patent on their 42 U.S.C. § 262(*l*)(3)(A) list, and subsequently refusing to remove the '553 patent from their 42 U.S.C. § 262(*l*)(3)(A) list or to otherwise remove the existing case or controversy surrounding the '553 patent.

172. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '553 patent.

173. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive

infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

174. The claims of the '553 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

175. Amgen is entitled to a judgment that the claims of the '553 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 16
Non-Infringement and Invalidity of U.S. Patent No. 7,375,193

176. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

177. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,375,193 ("the '193 patent").

178. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '193 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

179. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '193 patent.

180. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and

enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

181. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '193 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

182. The claims of the '193 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '193 patent are invalid under 35 U.S.C. § 103, at least in view of Kim *et al.*[30] and/or WO 96/30046, alone or in combination with Carter (I) *et al.*,[31] Carter (II) *et al.*,[32] Xiang *et al.*,[33] and/or U.S. Patent No.

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[30] Kim *et al.*, *The vascular endothelial growth factor proteins: identification of biologically relevant regions by neutralizing monoclonal antibodies*, Growth Factors, Vol. 7, 53-64 (1992)

[31] Carter *et al.*, *Humanization of an anti-p185^{HER2} antibody for human cancer therapy*, 89 Proc. Natl. Acad. Sci., 4285-4289 (1992)

5,530,101. Additionally, one or more of the claims of the '193 patent are invalid under 35 U.S.C. § 112 because, for example, the '193 patent fails to enable and provide adequate written description for "[a]n aqueous formulation useful for inhibiting VEGF-induced angiogenesis in a subject, comprising as the active compound a humanized anti-VEGF antibody in a buffer, wherein the anti-VEGF antibody comprises a heavy chain variable domain comprising the following heavy chain complementarity determining region (CDR) amino acid sequences: CDRH1 (GYTFTNYGMN; SEQ ID NO: 1), CDRH2 (WINTYTGEPTYAADFKR; SEQ ID NO: 2) and CDRH3 (YPHYYGSSHWYFDV; SEQ ID NO: 3) and a light chain variable domain comprising the following light chain CDR amino acid sequences: CDRL1 (SASQDISNYLN; SEQ ID NO: 4), CDRL2 (FTSSLHS; SEQ ID NO: 5) and CDRL3 (QQYSTVPWT; SEQ ID NO: 6)."

183. Amgen is entitled to a judgment that the claims of the '193 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 17
Non-Infringement and Invalidity of U.S. Patent No. 7,622,115

184. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

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[32] Carter *et al.*, *High level Escherichia coli expression and production of a bivalent humanized antibody fragment*, 10 Biotechnology, 163-167 (1992)

[33] Xiang *et al.*, *Genetic engineering in mouse/human chimeric antibody*, Immunol., Vol. 75, 209-216 (1992)

185. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,622,115 ("the '115 patent").

186. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '115 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

187. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '115 patent.

188. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

189. The claims of the '115 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). The Patent Trial and Appeal Board recently found claims 1–5 of the '115 patent were unpatentable

over the prior art. *See Hospira, Inc. v. Genentech, Inc.*, IPR2016-01771, Paper No. 34, at 21 (PTAB Mar. 9, 2018).

190. Amgen is entitled to a judgment that the claims of the '115 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 18
Non-Infringement and Invalidity of U.S. Patent No. 7,807,799

191. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

192. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 7,807,799 ("the '799 patent").

193. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '799 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

194. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '799 patent.

195. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed

by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

196. The claims of the '799 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). The Patent Trial and Appeal Board recently found claims 1–3 and 5–11 of the '799 patent were unpatentable over the prior art. *See Hospira, Inc. v. Genentech, Inc.*, IPR2016-01837, Paper No. 40, at 51 (PTAB Mar. 6, 2018).

197. Amgen is entitled to a judgment that the claims of the '799 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 19
Non-Infringement and Invalidity of U.S. Patent No. 7,923,221

198. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

199. Plaintiffs have alleged that Genentech and City of Hope are co-owners of U.S. Patent No. 7,923,221 ("the '221 patent").

200. A case or controversy exists because Plaintiffs have alleged that Amgen has

infringed and will infringe one or more claims of the '221 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

201. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '221 patent.

202. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

203. Under 35 U.S.C. § 271(e)(1), Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any claim of the '221 patent because particular activities related to ABP 215, such as the manufacture or testing of ABP 215 related to submission of the BLA, were and will be solely for uses reasonably related to the development and submission of information under a federal law that regulates the manufacture, use, or sale of drugs.

204. The claims of the '221 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 102, 103, and/or 112 for at least the reasons and/or based on the references set forth herein and in Amgen's

disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). For example, the claims of the '221 patent are invalid under 35 U.S.C. § 103, at least over U.S. Patent No. 4,495,280 and in combination with one or more of Southern 1982,[34] Riggs *et al.*,[35] Bobrzecka *et al.*,[36] U.S. Patent No. 4,237,224, Ringold *et al.*,[37] Mirault *et al.*,[38] and/or Roggenkamp *et al.*[39] Additionally, one or more of the claims of the '221 patent are invalid under 35 U.S.C. § 112 because, for example, the '221 patent fails to enable and provide adequate written description for "[a] method for making an antibody heavy chain or fragment thereof and an antibody light chain or fragment thereof each having specificity for a desired antigen, wherein the heavy chain or fragment thereof comprises a human constant region sequence and a variable region comprising non human mammalian variable region sequences, the method comprising culturing a recombinant host cell comprising DNA encoding the heavy chain or fragment thereof and the light chain or fragment thereof and recovering the heavy chain or fragment thereof and light chain or fragment thereof from the host

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[34] Southern P.J. *et al.*, *Transformation of Mammalian Cells to Antibiotic Resistance with a Bacterial Gene Under Control of the SV40 Early Region Promoter*, 1 JOURNAL OF MOLECULAR AND APPLIED GENETICS 327-41 (1982)

[35] Riggs A.D. *et al.*, *Synthetic DNA and Medicine*, 31 AMERICAN JOURNAL OF HUMAN GENETICS 531-38 (1979)

[36] Bobrzecka K *et al.*, *The Method of Controlled Rearrangement of Protein Disulphides and its Use for Synthesis of Chimeric Immunoglobulin G*, 2 IMMUNOLOGY LETTERS 151-55 (1980)

[37] Ringold G. *et al.*, *Co-expression and Amplification of Dihydrofolate Reductase cDNA and the* Escherichia coli *XGPRT Gene in Chinese Hamster Ovary Cells*, 1 JOURNAL OF MOLECULAR AND APPLIED GENETICS 165-75 (1981)

[38] Mirault M.-E. *et al.*, *Regulation of Heat-Shock Genes: a DNA Sequence Upstream of* Drosophila hsp70 *Genes is Essential for Their Induction in Monkey Cells*, 1 THE EMBO JOURNAL 1279-85 (1982)

[39] Roggenkamp R *et al.*, *Expression and Processing of Bacterial β-Lactamase in the Yeast* Saccharomyces cerevisiae, 78 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 4466-70 (1981)

cell culture."

205. Amgen is entitled to a judgment that the claims of the '221 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons and/or based on the references set forth herein and in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 20
Non-Infringement and Invalidity of U.S. Patent No. 8,044,017

206. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

207. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 8,044,017 ("the '017 patent").

208. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '017 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

209. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '017 patent.

210. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were

"moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

211. The claims of the '017 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

212. Amgen is entitled to a judgment that the claims of the '017 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 21
Non-Infringement and Invalidity of U.S. Patent No. 8,460,895

213. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

214. Plaintiffs have alleged that Hoffman-La Roche, Inc. is the owner of U.S. Patent No. 8,460,895 ("the '895 patent"), and that Genentech is the exclusive licensee with the sole right to enforce that patent pursuant to a Patent License Agreement between Genentech and Hoffman-La Roche, Inc. dated January 13, 2017.

215. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '895 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

216. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '895 patent.

217. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

218. The claims of the '895 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

219. Amgen is entitled to a judgment that the claims of the '895 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 22
Non-Infringement and Invalidity of U.S. Patent No. 8,512,983

220. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

221. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 8,512,983 ("the '983 patent").

222. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '983 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

223. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '983 patent.

224. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

225. The claims of the '983 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at

least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

226. Amgen is entitled to a judgment that the claims of the '983 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 23
Non-Infringement and Invalidity of U.S. Patent No. 8,574,869

227. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

228. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 8,574,869 ("the '869 patent").

229. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '869 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

230. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '869 patent.

231. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were

"moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

232. The claims of the '869 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

233. Amgen is entitled to a judgment that the claims of the '869 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 24
Non-Infringement and Invalidity of U.S. Patent No. 8,633,302

234. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

235. Plaintiffs have alleged that Hoffman-La Roche, Inc. is the owner of U.S. Patent No. 8,633,302 ("the '302 patent"), and that Genentech is the exclusive licensee with the sole right to enforce that patent pursuant to a Patent License Agreement between Genentech and Hoffman-La Roche, Inc. dated January 13, 2017.

236. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '302 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

237. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '302 patent.

238. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

239. The claims of the '302 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

240. Amgen is entitled to a judgment that the claims of the '302 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 25
Non-Infringement and Invalidity of U.S. Patent No. 8,710,196

241. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

242. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 8,710,196 ("the '196 patent").

243. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '196 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

244. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '196 patent.

245. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

246. The claims of the '196 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at

least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

247. Amgen is entitled to a judgment that the claims of the '196 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 26
Non-Infringement and Invalidity of U.S. Patent No. 9,441,035

248. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

249. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 9,441,035 ("the '035 patent").

250. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '035 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

251. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '035 patent.

252. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were

"moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

253. The claims of the '035 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

254. Amgen is entitled to a judgment that the claims of the '035 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 27
Non-Infringement and Invalidity of U.S. Patent No. 9,487,809

255. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

256. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 9,487,809 ("the '809 patent").

257. A case or controversy exists because Plaintiffs have alleged that Amgen has infringed and will infringe one or more claims of the '809 patent, as set forth in Plaintiffs' disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(C).

258. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '809 patent.

259. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

260. The claims of the '809 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

261. Amgen is entitled to a judgment that the claims of the '809 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 28
Non-Infringement and Invalidity of U.S. Patent No. 9,795,672

262. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

263. Plaintiffs have alleged that Genentech is the owner of all right, title, and interest in U.S. Patent No. 9,795,672 ("the '672 patent").

264. A case or controversy exists because, among other things, Plaintiffs have expressed their belief that a claim of patent infringement of the '672 patent could reasonably be asserted against Amgen by identifying the '672 patent in their alleged 42 U.S.C. § 262(*l*)(7) supplement of their 42 U.S.C. § 262(*l*)(3)(A) list.

265. Amgen has not directly or indirectly infringed, and will not directly or indirectly infringe, any valid and enforceable claim of the '672 patent.

266. Plaintiffs' alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) did not provide, on a claim by claim basis, Plaintiffs' opinion regarding the purported infringement, validity, and enforceability of all claims for which Amgen had provided non-infringement, invalidity, and/or unenforceability positions in its detailed statement pursuant to 42 U.S.C. § 262(*l*)(3)(B). According to Plaintiffs, those claims for which they had failed to provide responsive validity and enforceability positions were claims that "Genentech does not presently allege will be infringed by the manufacture, use, sale, offer for sale, or importation of ABP 215," and therefore were "moot," and, as a result, Plaintiffs, for example, waived the ability to assert, or are estopped from asserting, against Amgen at least any and all claims for which they did not provide responsive infringement, validity, and enforceability positions in their alleged statement pursuant to 42 U.S.C. § 262(*l*)(3)(C) and which they characterized as "moot."

267. The claims of the '672 patent are invalid for failure to comply with one or more conditions of patentability set forth in one or more provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112, or under other judicially-created bases for invalidation and/or unenforceability, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B).

268. Amgen is entitled to a judgment that the claims of the '672 patent are invalid and/or unenforceable, and that Amgen has not and will not infringe any valid and enforceable claim of that patent, for at least the reasons set forth in Amgen's disclosure pursuant to 42 U.S.C. § 262(*l*)(3)(B). Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

Count 29
Inequitable Conduct During Prosecution of the '213 Patent

269. Amgen restates and incorporates by reference the allegations in the preceding paragraphs as if fully set forth herein.

270. During the prosecution of the '213 patent, Genentech made misrepresentations and omissions material to patentability and did so with the specific intent to mislead or deceive the Patent Office.

271. Genentech deliberately misrepresented the teachings of U.S. Patent No. 5,530,101 ("the '101 patent") to the Patent Office in order to overcome a rejection based on that reference. Specifically, Genentech told the Examiner that the '101 patent does not use the Kabat numbering system, despite its repeated references to "numbering according to Kabat" and "the Kabat system."

272. Genentech also made deliberate misrepresentations and omissions regarding Queen 1989, including (i) falsely distinguishing Queen 1989 on the ground that it used "sequential numbering," as opposed to the Kabat numbering system; and (ii) providing information at the request of the Examiner that conspicuously omitted a key residue ("62L") disclosed in the prior art. Deceptive intent by Genentech is the single most reasonable inference to be drawn from the prosecution history and all other available evidence.

273. On November 17, 1993, Genentech filed its patent application with claims requiring substitutions at specific locations, including positions "62L" and "93H." On December

9, 1994, the Examiner issued a Non-Final Rejection, rejecting the claims as obvious under § 103 over EP 0239400, Queen 1989, Riechmann 1988.

274. On June 12, 1995, Genentech amended the pending claims and deleted references to amino acid position "62L."

275. Following a final rejection and an Examiner interview, the case was transferred to a different Examiner and a new non-final rejection issued on December 23, 1996. The new Examiner maintained all prior rejections and further rejected the pending claims as anticipated by the '101 patent.

276. In response to the non-final rejection, Genentech once again amended the pending claims on June 27, 1997, adding amino acid position "62L" back into the claims.

277. On October 7, 1997, Genentech argued in its remarks to the Patent Office that Queen 1989 and the '101 patent were distinguishable because they "use sequential numbering for the variable domain residues of the antibodies described in these references, whereas the claims of the instant application use Kabat numbering for the framework region residues." Genentech repeated the same argument later in the prosecution of the '213 patent to distinguish Queen 1989 and the '101 patent with specific reference to residue "93H":

> Applicants point out that – as explained earlier in prosecution – the substituted 93 FR residue in the cited references [Queen 1989 and the '101 patent] is not 93H 'utilizing the numbering system set forth in Kabat' (see page 13, line 33 through to line 22 on page 14 of the present application) as required by claims 115-117, 123 and 127 of the present application. In particular, as noted on page 6 of the amendment hand carried to the Office on 10/7/97, residue no. 93 in the heavy chain of the anti-Tac antibody in the cited references, is actually 89H utilizing the numbering system set forth in Kabat. The cited references use a sequential numbering system, rather than the Kabat numbering system claimed herein.

(*See* Applicant Remarks, dated Apr. 26, 2001, at 7.)

278. On December 11, 2001, the Examiner indicated during an interview that the pending claims were allowable.

279. Contrary to Genentech's representations to the Patent Office—namely, that the '101 patent does not use the Kabat numbering system—the '101 patent states: "Residues are numbered according to the Kabat system (E. A. Kabat et al., Sequences of Proteins of Immunological Interest (National Institutes of Health, Bethesda, Md.) (1987)." ('101 patent at 9:13–18.) In addition, the '101 patent expressly refers to "numbering according to Kabat, op. cit." with specific reference to position 93 in the heavy chain. (*See id.* at 15:17–37.) Moreover, Table 5 of the '101 patent refers to residue "H93," with explicit reference to numbering "according to the Kabat system," as shown below:

TABLE 5

Residues in the framework sequence showing contacts with residues in the hypervariable regions.

Residue No.[1]	Amino Acid	Contacting CDR residues[2]
Fd79		
L49	Lys	L50Y, L53N, L55E, H99D, H100Y
H93	Leu	H35S, H37V, H100CF
Fd138-80		
L36	His	L34V, L89Q
H27	Tyr	H32H, H34I
H30	Tyr	H32H, H53R
H48	Phe	H63F
H66	Lys	H63F
H67	Ala	H63F

1. The amino acid residues are numbered according to the Kabat system (E. A. Kabat et al., Sequences of Proteins of Immunological Interest, National Institutes of Health, Bethesda, MD (1987)): the first letter (H or L) stands for the heavy chain or light chain. The following number is the residue number. The last letter is the amino acid one letter code.
2. The hypervariable regions are defined according to Kabat: Light chain CDR1: residue 24–34; CDR2: 50–56; CDR3: 89–97. Heavy chain CDR1: 31–35; CDR2: 50–65; CDR3: 95–102.

280. In order to overcome the § 102 rejection based on the '101 patent, Genentech falsely represented to the Patent Office that the '101 patent used sequential numbering, while arguing that the "claims of the instant application use Kabat numbering for the framework region

residues." Genentech misrepresented the teachings of the '101 patent, despite clear and repeated references in the '101 patent to the Kabat numbering system. Absent Genentech's false and misleading distinction, the Examiner had no reason to withdraw the § 102 rejection based on the '101 patent.

281. Genentech also made deliberate and material misrepresentations and omissions regarding Queen 1989 during the prosecution of the '213 patent. Genentech distinguished Queen 1989 on the ground that it used "sequential numbering," as opposed to the Kabat numbering system. At the Examiner's request, Genentech submitted a comparison of the different numbering systems purportedly utilized in Queen 1989 and the pending claims.[40] The alignments provided by Genentech to the Examiner conspicuously omitted the "62L" residue in both numbering systems. As noted above, residue "62L" was recited in then-pending claims of the '213 patent, and Queen 1989 expressly discloses "residues at positions corresponding to . . . 47 and 62 of the light chain (Fig. 2)." (*See* Queen 1989 at 10032.) Importantly, Queen 1989 discloses residues in the Kabat numbering system and, in particular, residue "62 of the light chain."

282. Amgen is entitled to a judgment that the claims of the '213 patent are unenforceable as a result of Genentech's inequitable conduct. Such a declaration is necessary and appropriate at this time to determine the rights and obligations of the parties.

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[40] *See* 10/7/97 Applicant Remarks at 6–10 ("As requested by the Examiner in the interview, alignments of heavy chain variable domain (Exhibit A) and light chain variable domain (Exhibit B) sequences of the 101 patent (including the sequences for the murine and humanized anti-Tac antibody of Queen *et al.*) with sequential and Kabat residue numbering is attached.").

PRAYER FOR RELIEF

WHEREFORE, Amgen respectfully requests that the Court enter judgment:

A. adjudging and decreeing that Plaintiffs be denied all forms of relief requested in their Complaint;

B. dismissing the Complaint in its entirety with prejudice;

C. declaring that the claims of the patents-in-suit have not been and will not be infringed by Amgen;

D. declaring that the claims of the patents-in-suit are invalid;

E. declaring that the claims of the patents-in-suit are unenforceable;

F. finding that this is an exceptional case under 35 U.S.C. § 285;

G. awarding attorneys' fees, costs and disbursements to Amgen; and

H. granting such other and further relief as this Court deems just and proper.

YOUNG CONAWAY STARGATT & TAYLOR, LLP

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Dated: June 5, 2018

CERTIFICATE OF SERVICE

I, James L. Higgins, Esquire, hereby certify that on June 5, 2018, I caused to be electronically filed a true and correct copy of Amgen Inc.'s First Amended Answer, Affirmative Defenses, and Counterclaims to Plaintiffs' First Amended and Supplemental Complaint with the Clerk of the Court using CM/ECF, which will send notification to the following counsel of record:

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I further certify that on June 5, 2018, I caused a copy of the foregoing document to be served on the above-listed counsel of record and on the following non-registered participants in the manner indicated:

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