2018-1959

United States Court of Appeals for the Federal Circuit

GENENTECH, INC.,

Appellant,

– v. –

HOSPIRA, INC.,

Appellee,

UNITED STATES,

Intervenor.

On Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2016-01771

BRIEF FOR APPELLEE

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CERTIFICATE OF INTEREST

1. The full name of every party represented by us is:

   Hospira, Inc.

2. The name of the Real Party in interest (Please only include any real party in interest NOT identified in Question 3) represented by us is:

   Hospira, Inc.

3. All parent corporations and any publicly held companies that own 10% or more of the stock of the party represented by us are:

   Pfizer Inc.

4. The names of all law firms and the principals or associates that appeared for the party now represented by us in the trial court or are expected to appear in this Court (and who have not or will not enter an appearance in this case) are:

   None.

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. *See* Fed. Cir. R. 47.4(a)(5) and 47.5(b).

   Genentech, Inc. and City of Hope v. Amgen, Inc., No. 17-1407 (D. Del.); *Genentech, Inc. and City of Hope v. Amgen, Inc.*, No. 17-1471 (D. Del.).

Dated: November 19, 2018

/s/ Thomas. J. Meloro
Thomas J. Meloro

Attorney for Appellee Hospira, Inc.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Statues, Rules and Regulations

STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, counsel for appellee Hospira, Inc. ("Hospira") states that (a) no other appeal in or from the same proceeding was previously before this or any other appellate court whether under the same or a similar title; and (b) the title and number of cases known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in this pending appeal are: *Genentech, Inc. and City of Hope v. Amgen, Inc.*, No. 17-1407 (D. Del.) and *Genentech, Inc. and City of Hope v. Amgen, Inc.*, No. 17-1471 (D. Del.).

STATEMENT OF THE ISSUES

1. Whether the Board's claim construction ruling for U.S Patent No. 7,622,115 (the "'115 patent") should be affirmed, where the Board's construction is clear on its face, where the Board identified the intrinsic and extrinsic evidence that it found persuasive, and where the Board's analysis is commensurate with the appellant's arguments in the record.

2. Whether the Board's obviousness determination for the '115 patent should be affirmed where it identified the parties' evidence that it found persuasive, explained why the claims would have been obvious in view of that evidence, and concluded that Genentech failed to raise a secondary considerations argument in the absence of any assertion of a nexus to the claims.

3. Whether the Court should affirm the Board's decision of unpatentability of the '115 patent on an alternative ground based on Hospira's claim construction, where the Appellant admitted that the claims are anticipated under Appellee's claim construction.

4. Whether *inter partes* review ("IPR") of a patent issued prior to enactment of the Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284 (2011) is Constitutional.

STATEMENT OF CASE

I. STATE OF THE ART RELATED TO GASTROINTESTINAL ("GI") PERFORATION IN CANCER PATIENTS RECEIVING CHEMOTHERAPY

A. The Standard of Care in the Art

The Board concluded that "the standard of care and the knowledge of a person of ordinary skill in the art would have guided a physician to assess patients receiving bevacizumab for GI perforation." Appx20. The Board also explained that "such an assessment necessarily begins with evaluating patients for symptoms of GI perforation, such as nausea and abdominal pain, and in the event of a showing of such signs, a physician would have assessed the patient for GI perforation." *Id*.

The record establishes the standard of care for cancer patients receiving chemotherapy who might be experiencing a GI perforation at the time of the

alleged invention. Patients experiencing GI perforation typically exhibit one or more symptoms, including, for example, severe abdominal pain, nausea, vomiting, and/or fever. Appx388, Appx529, Appx1568. The person of ordinary skill in the art ("POSA") would have understood that GI perforation is one possible cause of such symptoms in cancer patients undergoing chemotherapy. Appx1065, Appx1152-1153. The POSA would have evaluated such patients by observing the patient, inquiring about medical history, monitoring vital signs, and performing a physical examination of the abdominal area. Appx395, Appx1065, Appx1178-1180. If the evaluation raised the POSA's suspicion of GI perforation, the POSA would likely have ordered additional testing, such as an x-ray or a CT scan, to aid in diagnosing the patient. Appx389, Appx1152-1153, Appx1196-1197, Appx1201-1203, Appx1569. If the evaluation did not provide results consistent with GI perforation, the POSA would have likely concluded that the cause was not GI perforation. Appx389, Appx1065, Appx1196-1197, Appx1201-1203, Appx1569.

The standard of care described above is confirmed by Kennedy & Spence, a prior art book chapter about "Gastrointestinal Emergencies" in cancer patients, which has a section—6.3—specifically devoted to GI perforation. Appx521-523, Appx529-531. In Section 6.3.1, titled "Clinical assessment," and Section 6.3.2, titled "Investigations," Kennedy & Spence generally describes the same procedure

outlined above. Appx529-530. Section 6.3.1 instructs how to perform a clinical assessment for GI perforation in cancer patients, including examining for "abdominal tenderness and guarding, abdominal distension, and absent bowel sounds." *Id*. Section 6.3.2 instructs how to perform follow-up testing after the clinical assessment, including looking for free air in the peritoneum. Appx530. Thus, the standard of care for cancer patients receiving chemotherapy who might be experiencing a GI perforation is clear from the record.

B. Known Association Between GI Cancer and GI Perforation

The record establishes and the Board found that it was known at the time of the invention that patients suffering from GI-related cancers had a higher risk of GI perforation. Appx20. The prior art teaches the existence of a causal link between GI cancer and GI perforation as well as the mechanism though which GI cancer leads to GI perforation. For example, Mandava (Appx587-590) describes that prior publications had reported GI perforation occurring in 3% to 9% of colorectal cancer patients and that GI perforation can occur due to "direct perforation from tumor necrosis." Appx588, *see* Appx390. Similarly, Kennedy & Spence teaches that GI perforation was one of the "most common gastrointestinal emergencies in cancer patients" (Appx523, *see* Appx382) and explains that it occurs "due to weakening of the gut wall at the site of a tumor." Appx529, *see* Appx390. Pfizer's expert, Dr. Neugut—Myron M. Studner Professor of Cancer Research in Medicine

at Columbia University College of Physicians & Surgeons—testified in his opening declaration (Appx348-498) that "it was known that patients suffering from GI cancers or other cancer types that have metastasized to the GI were at risk of GI perforation." Appx390 (footnotes omitted). Genentech's experts appear to agree. Dr. Levy admitted during cross-examination that in her own practice, she has seen GI perforations that she attributed to GI tumors. Appx1322-1325, Appx1386. Dr. Morse admitted during cross examination that cancer is a factor in evaluating whether the patient has a GI perforation. Appx1087-1089, Appx1177-1178 ("One [factor] is they do have a cancer, but that's not the only thing. In fact, it's not the predominant thing, necessarily, but it is a factor."). Thus, the record establishes that there was a known causative link between GI cancer and GI perforation at the time of the alleged invention.

C. Known Association Between Systemic Chemotherapy and GI Perforation

The record establishes and the Board found that it was known at the time of the alleged invention that cancer patients receiving systemic chemotherapy had a higher risk of GI perforation. Appx20. The prior art teaches the existence of a causal link between systemic chemotherapy and GI perforation as well as the mechanism through which systemic chemotherapy causes GI perforation. For example, Kennedy & Spence teaches that "[a]nother important cause is tumor necrosis during radiotherapy or cytotoxic chemotherapy" and instructs physicians

to "ask if the patient has recently received chemotherapy as this may cause perforation by weakening the bowel wall at a site of tumor." Appx529, *see* Appx391. Similarly, Wada teaches that "[w]hen lymphoma invades the gastrointestinal tract and is treated with effective chemotherapy, tumor necrosis with perforation is the potential complication." Appx576, *see* Appx392. Dr. Neugut agrees. Appx391 ("It was also known at the time of the invention that systemic chemotherapy was associated with a higher risk of GI perforation."). Genentech's experts do not disagree. Indeed, Dr. Morse, admitted on cross-examination that there was a known link:

> And this data here, if you put it in its entirety, certainly raises very legitimate conclusions that many authors have made, and I would share, that chemotherapy or drugs given with chemotherapy to people with cancer can actually cause perforation, but it turns out to be fairly infrequent.

Appx1182-1184, *see* Appx237. Similarly, the '115 Patent describes the occurrence of several GI complications including GI perforation in cancer patients receiving chemotherapy:

> Severe bowel complications, particularly in patients with neutropenia, have been reported with IFL and other chemotherapy regimens for colorectal cancer and in one series, fistulas were reported in over 2 percent of patients treated with fluorouracil-based regimens. Saltz et al. (2000) *New Engl. J. Med*. 343:905-914; Rothenberg et al. (2001) *J. Clin. Oncol*. 19:3801-7; Tebbutt et al. (2003) *Gut* 52:568-73.

Appx60, *see* Appx370-371. Dr. Morse confirmed that a "fistula" is a type of GI perforation. Appx1185-1186, Appx1253-1254. Thus, the record establishes that there was a known causative link between chemotherapy and GI perforation at the time of the alleged invention.

D. Physicians were Alert for the Possibility of GI Perforation in Cancer Patients Undergoing Systemic Chemotherapy

The record establishes and the Board concluded that "[t]he physician would have known that GI perforation was associated with a high rate of death, and thus the physician would have been particularly concerned with a life-threatening complication such as GI perforation." Appx20. The prior art specifically instructs physicians to be alert to the possibility of GI perforation in cancer patients receiving systemic chemotherapy. For example, Hata instructs that "[s]pecial caution during chemotherapy is needed for patients with possible gastrointestinal involvement with tumor." Appx571, *see* Appx392. Liaw instructs that "patients receiving 5-FU infusion and cisplatin with dexamethasone for antiemesis who complain of epigastric pain should be mentioned for a gastroduodenal ulcer or even a perforation." Appx593, *see* Appx391. Hospira's expert, Dr. Neugut, opined that the prior art instructs physicians to assess cancer patients for GI perforations. Appx393.

The prior art also stresses the importance of diagnosing GI perforation early in cancer patients receiving chemotherapy. For example, Liaw explains that

"[e]arly diagnosis with aggressive surgical intervention is essential to improve survival" (Appx593, *see* Appx393) and instructs that "[e]arly diagnosis of ulcer perforation in patients with cancer during systemic CT is therefore mandatory." Appx595, *see* Appx391. Similarly, Wada et al. teaches that "[t]he favorable outcome of the surgical intervention is attributed to early diagnosis, prompt exploration, and selective operative procedures." Appx574, *see* Appx393. Dr. Neugut agrees. Appx393 ("It was known at the time that early detection of GI perforation is essential for increasing the chances of survival of a patient."). Genentech did not challenge the reported data or the authors' conclusions and instructions in any of these prior art references. Thus, the record establishes that physicians would have been alert for the possibility of GI perforation in cancer patients receiving systemic chemotherapy and would have known the importance of early diagnosis.

E. Known Association Between Anti-VEGF Antibodies and Impaired GI Injury Repair

Bevacizumab is an antibody that targets and inhibits the biological activity of the protein Vascular Endothelial Growth Factor (VEGF). Appx384-386; Brief for Appellant ("Br.") at 4. The Board concluded that "the physician would have known that the protein VEGF promotes GI injury repair and that a VEGF-neutralizing antibody, such as bevacizumab, could impair the ability of VEGF to promote GI injury repair and thus potentially exacerbate GI tissue injury caused by

chemotherapy." Appx20-21. Indeed, Dr. Neugut testified that Matsui (Appx561-567) and Jones (Appx1012-1021) teach that anti-VEGF antibodies can impair VEGF-mediated repair of GI injury in animal models. Appx394. For example, Matsui teaches that "[b]locking endogenous VEGF effects with anti-VEGF antibodies exacerbated mucosal injury." Appx561. Similarly, Jones teaches that "[a] neutralizing anti-VEGF antibody significantly reduced the acceleration of ulcer healing resulting from the treatment [with VEGF]." Appx1012. Genentech did not challenge the data reported in Matsui and Jones or the interpretations and conclusions expressed by the authors. Thus, the record establishes that it was known at the time of the alleged invention that VEGF-neutralizing antibodies can interfere with GI injury repair in animal models.

F. U.S. Patent No. 7,622,115

The '115 patent discloses methods for treating cancer using bevacizumab. For example, the '115 patent discloses that "the invention concerns the treatment of human patients susceptible to or diagnosed with cancer using an anti-VEGF antibody, preferably in combination with one or more additional anti-tumor therapeutic agents." Appx23, *see* Appx368. Specifically, the '115 patent discloses that "the invention provides an effective approach for treating cancers, partially based on the unexpected results that adding anti-VEGF antibody to a standard

chemotherapy results in statistically significant and clinically meaningful improvements among cancer patients." Appx38, *see* Appx368.

The '115 patent includes information about the safety of bevacizumab treatment, concluding that the therapy is safe. For example, the patent discloses that "[t]he present invention provides methods of effectively treating cancers without significant adverse effects to the human patient subject to treatment." Appx56. Specifically, the patent describes two clinical trials in Examples 1 and 2, wherein bevacizumab was administered to cancer patients in combination with chemotherapeutic agents. Appx56-62, *see* Appx368-372. The patent discloses that "there was no significant difference in the incidence of adverse events leading to hospitalization or to the discontinuation of study treatment or in the 60-day rate of death from any cause." Appx59, *see* Appx369. Consequently, Example 1 discloses that "[t]his clinical benefit was accompanied by a relatively modest increase in side effects of treatment, which were easily managed." Appx59, *see* Appx370. Example 2 concludes that "[b]evacizumab treatment had no detrimental effect on quality of life" and that "[a]dverse events leading to death or study discontinuation were similar in the two groups." Appx61, *see* Appx371-372.

The '115 patent does not teach an actual association between bevacizumab and GI perforation. Example 1 reports that six patients (1.5%) in the bevacizumab group experienced a GI perforation (Appx59, *see* Appx369-370) and Example 2

reports that two patients (2%) in the bevacizumab group experienced a GI perforation. Appx61, *see* Appx372. The patent explains that "[o]ne new potential adverse effect that occurred was gastrointestinal perforation" and reports that "[t]his complication was uncommon and had variable clinical presentations." Appx60, *see* Appx370. The patent also explains that "(f)actors other than the study treatment that may have been associated with gastrointestinal perforation were colon surgery within the previous two months in two patients and peptic-ulcer disease in one patient." Appx59, *see* Appx370. And the incidence of GI perforation was not identified among the adverse events in the bevacizumab group exhibiting a statistically significant difference compared to the control group. Appx59, *see* Appx370. Nor is there any evidence in the record that the patent teaches an actual association between bevacizumab and GI perforation or that the inventors understood that there is an actual association.

The '115 patent also does not describe the handful of incidents of GI perforation as "unexpected" and does not expressly raise any alarm or concern about the possibility of GI perforation. Rather, the patent discloses that "the treatment of the present invention unexpectedly contains side effects at acceptable level, at the same time significantly improve anticancer efficacy." Appx56. As explained above, the patent discloses that GI complications, including GI perforations, had been reported previously in cancer patients receiving

chemotherapy. Appx60. Nor is there any evidence in the record that the inventors were otherwise concerned about the incidence of GI perforation; as explained above, the patent discloses that the treatment was safe and that factors other than the bevacizumab treatment might have caused the perforations observed in some of the patients.[1] Appx59, *see* Appx370.

The '115 patent does not expressly describe "[a] method for treating cancer in a patient comprising administering an effective amount of bevacizumab and assessing the patient for gastrointestinal perforation during treatment with bevacizumab," apart from claim 1. The Abstract does not describe the purported invention as relating to GI perforation or to methods of assessing for GI perforation. Appx23. Nor do the Summary of the Invention and Detailed Description sections of the '115 patent describe any embodiments of the purported invention related to GI perforation. Genentech's expert, Dr. Morse, agrees that the patent does not teach how the handful of patients who experienced a GI perforation were identified as having a GI perforation. Appx1240-1241, *see* Appx1071-1072. In contrast to Genentech's assertion in its brief (Br. at 3-4), the patent does not describe any method of treating patients with bevacizumab that is "safer" or

[1] Indeed, claims directed to GI perforation were not presented during prosecution until more than four years after the provisional application in the '115 patent family was filed, and only after the Patent Office rejected broader method claims for using bevacizumab to treat cancer. Appx79-82, Appx978.

"improved." The patent includes no description or data in support of any method of treatment with bevacizumab that is "safer" or "improved" compared to any other method of treatment with bevacizumab. Nor did Genentech present any expert testimony in the record below that the patent teaches a "safer" or "improved" method of bevacizumab treatment.

In fact, the record clearly shows that the possibility of an association between bevacizumab and GI perforation did not impact actual medical practice. Dr. Neugut explained in his supplemental declaration (Appx1059-1086) that the practice of assessing cancer patients for GI perforation is the same now as it was at the time of the alleged invention. Appx1081. He testified that his treatment of colorectal cancer patients and evaluations during regular office visits is the same now for patients receiving bevacizumab as it was for patients receiving other therapy. Appx395. Similarly, Dr. Morse agreed that the practice of assessing patients for GI perforation has been the same throughout his career, including before the time of the alleged invention. *See* Appx1130, Appx1157-1158, Appx1081-1083. And Dr. Levy testified that it has never been her practice to tailor CT scan conditions for cancer patients based on their cancer therapy. Appx1340-1341, *see* Appx1083. Moreover, the February 13, 2003 NCI letter includes no suggestion that the standard of care with respect to assessing cancer patients for GI perforation should be changed. Appx2039-2042. Dr. Neugut and

Dr. Morse agree that even years later, the label for Genentech's bevacizumab product—Avastin®—does not require physicians to assess cancer patients receiving bevacizumab for GI perforation. Appx1083, Appx1153-1156, Appx2065-2104.

SUMMARY OF THE ARGUMENT

I. The Board's determination that claims 1-5 would have been obvious and its ultimate determination of unpatentability should be affirmed. The Board's claim construction is supported by substantial evidence and its explanation of its claim construction analysis is proper and allows for meaningful review. Moreover, the Board's adoption in the Final Decision of a claim construction different from either party's construction is proper because Genentech had notice and an opportunity to be heard. Additionally, the Board's obviousness determination is supported by substantial evidence and its explanation of its analysis is proper and allows for meaningful review. Specifically, the Board correctly concluded that Genentech failed to raise a secondary considerations argument, where Genentech failed to assert any nexus to the purported novel aspect of the claimed method. Lastly, the cases that Genentech cites regarding the sufficiency of the Board's analyses are not instructive here and do not support Genentech's request for remand.

II. The Board's ultimate determination of unpatentability should be affirmed on an alternative ground based on Hospira's claim construction, where Genentech

admitted that claims 1-5 are anticipated under Hospira's construction. Hospira's construction comports with the plain and ordinary meaning of "assessing" and is supported by the intrinsic evidence. It is improper to import either a "diagnostic steps" or an intent limitation into the claims on the basis of disputed expert opinion and in the absence of any intrinsic evidence.

III. IPR of a patent issued prior to enactment of the Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284 (2011) ("AIA") is Constitutional. First, application of IPR to patents issued pre-AIA is not a retroactive application of the law. Even if such IPR were a retroactive application of the law, it would not constitute a taking without just compensation or a denial of due process.

STANDARD OF REVIEW

This Court reviews the Board's "ultimate determination of obviousness de novo and its underlying factual determinations for substantial evidence." *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 991 (Fed. Cir. 2017). The Court reviews underlying factual determinations concerning extrinsic evidence for substantial evidence and the ultimate construction of the claim de novo. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1280 (Fed. Cir. 2015), *aff'd sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016). "Substantial evidence is something less than the weight of the evidence but more than a mere scintilla of evidence." *Google Inc. v. Intellectual Ventures II LLC*, 701 F. App'x 946, 952

(Fed. Cir. 2017). A finding that a lower court misconstrued the claims does not necessitate reversing a finding of invalidity if the error was harmless. *Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997) ("if the claims were misconstrued, a finding of anticipation must be reversed unless the error was harmless").

ARGUMENT

I. THE COURT SHOULD AFFIRM THE BOARD'S HOLDING THAT CLAIMS 1-5 WOULD HAVE BEEN OBVIOUS

The Board's findings with respect to claim construction and obviousness are supported by substantial evidence. The Board's explanations of its claim construction and obviousness analyses are proper and allow for meaningful review. Moreover, the cases that Genentech relies on are not instructive here and do not support Genentech's argument that the Board's analyses are improper or its request for remand. Thus, the Court should affirm the Board's determination that claims 1-5 are obvious over the prior art of the instituted grounds and its unpatentability holding.

A. The Board's Claim Construction Analysis Is Proper

Genentech challenges the Board's claim construction decision in two ways. First, it argues that the Board's explanation of its claim construction and the basis for its construction is insufficient to allow meaningful review. Second, it effectively argues that the Board may not adopt a construction for the first time in its Final Decision that is different from either party's construction. Genentech's

first argument is wrong; the Board's claim construction is clear on its face, and the Board adequately explained the basis for its construction. Additionally, Genentech's second argument was correctly rejected by this Court in *Intellectual Ventures II LLC v. Ericsson Inc.*, 686 F. App'x 900 (Fed. Cir. 2017). Further, the cases that Genentech cites are not instructive here and do not support Genentech's arguments or request for remand. Thus, this Court should affirm the Board's claim construction and reject Genentech's request for remand.

1. The Board's claim construction is clear on its face

Genentech's argument that "the Board's construction is so vague as to be no construction at all" fails under scrutiny. Br. at 22. The Board construed the phrase "assessing the patient for gastrointestinal perforation" to mean "a targeted investigation, directed specifically to confirming the presence or absence of GI perforation." Appx7. It is clear from the construction itself that the Board partially agreed with Genentech's proposed construction, but rejected Genentech's proposed limitation requiring "diagnostic steps." The phrases "a targeted investigation"[2] and "directed specifically to" demonstrate that the Board partially agreed with Genentech's proposal, that the investigation must be done for the

[2] Genentech argued below that the "assessing" limitation requires a "targeted investigation." Appx182 ("An assessment of a particular condition connotes a targeted investigation of that condition."). Therefore, Genentech's critique that the Board's construction, which includes the phrase "targeted investigation," is unclear rings hollow.

specific purpose of confirming whether a GI perforation exists. Appx175, Appx182. Those phrases also demonstrate that the Board agreed with Genentech's argument that the claim requires a more specific investigation than merely looking for general signs and symptoms that could be consistent with GI perforation. Appx178. The Board's construction, however, plainly omits Genentech's proposed limitation requiring "diagnostic steps" that Genentech described as being capable of confirming whether a GI perforation exists. Appx175, Appx181. The fact that the only evidence that Genentech identifies as having been unaddressed by the Board pertains specifically to its proposed "diagnostic steps" limitation (Br. at 21-22) reveals that even Genentech understands that the Board rejected its narrow "diagnostic steps" requirement. Thus, the meaning and scope of the Board's claim construction is plain and clear.

2. The Board correctly refused to adopt Genentech's narrow "diagnostic steps" requirement

The record firmly supports the Board's rejection of Genentech's "diagnostic steps" requirement. First, Genentech identified *no* intrinsic evidence to affirmatively support the "diagnostic steps" limitation. *See* Appx1072. Genentech pointed to no evidence from the specification and relied on the prosecution history only to argue that Hospira's construction was too broad, but not to specifically support its "diagnostic steps" limitation. Appx175, Appx177-180, *see* Appx1072. Indeed, Dr Neugut explained that the specification does not disclose how the

patients who had GI perforations were identified or any "diagnostic steps" for GI perforation. Appx1069-1072. Genentech's expert, Dr. Morse, agrees that the patent does not teach how the patients were identified. Appx1240-1241, *see* Appx1071-1072.

Moreover, the "diagnostic steps" limitation is inconsistent with the fact that the "assessing" limitation was added during prosecution to overcome a new matter rejection over lack of written description support for the language "monitoring the patient for signs or symptoms of gastrointestinal perforation," because the specification does not "disclose any signs or symptoms of GI perforation or methods of monitoring." Appx981, Appx984-985. Indeed, the diagnostic steps that Genentech identifies, such as CT scans and x-rays require specific methods that look for a specific sign of GI perforation—free air in the peritoneum. Appx1649. Moreover, the only disclosures in the specification that Genentech pointed to during prosecution as offering support for the newly added "assessing" limitation are the safety assessments descriptions for two clinical studies and the description that GI perforation occurred in some patients (*see* Appx997); those sections do not describe diagnostic steps such as CT scans or x-rays for assessing GI perforation. *See* Appx1068-1071.

Further, Hospira's expert, Dr. Neugut, explained that the plain and ordinary meaning of "assessing" for GI perforation does not require "confirming" or

"diagnosing." Appx1065. Dr. Neugut's understanding is confirmed by the only prior art reference that expressly instructs how to perform a "[c]linical assessment" for GI perforation in cancer patients. Appx529-530. That instruction describes (1) taking a medical history and (2) looking for certain physical symptoms and signs of GI perforation, such as abdominal tenderness, and specifically omits diagnostic steps such as CT scans and x-rays from the discussion of "Clinical assessment." *Id*. Thus, the Board did not err in rejecting Genentech's narrow "diagnostic steps" limitation.

3. The Board properly explained the basis for its construction

Genentech's challenge that the Board failed "to provide *any basis* for its construction" is simply incorrect. Br. at 23 (emphasis in original). The Board's explanation of its construction is clear and spans over four pages of the Final Written Decision. Appx4-8. The Board credited Genentech's argument that Hospira's construction "effectively removes all meaning from the concept of 'assessing' someone 'for' GI perforation in particular." Appx5-6. The Board also explained that it agreed with Genentech's analysis of the prosecution history, quoting extensively from Genentech's responsive brief. Appx6-7. That analysis explains not *only* why the Board rejected Hospira's evidence, as Genentech contends (Br. at 24-25), but also why the Board adopted its construction.

Moreover, the Board emphasized Hospira's argument that the claim "should not be limited to performing any particular method of evaluation or evaluating *for any particular symptom or sign*." Appx5 (emphasis added by the Board). Thus, the Board credited Hospira's argument that, in view of the intrinsic evidence, the claims should not be limited to any particular method of evaluation for any particular symptom or sign. That underscores why the Board rejected Genentech's very narrow "diagnostic steps" requirement, which is effectively limited to CT scans or x-rays directed to look for a *particular sign* of GI perforation—free air in the peritoneum. Appx1649, Appx1197 ("and the diagnostic tests essentially are CT or radiographs. . . .").

Genentech challenges the Board's decision for not addressing its extrinsic evidence in the form of Dr. Morse's conclusory opinions. Br. at 21-22. But the Board's explanation of the basis for its claim construction is largely commensurate in scope with Genentech's arguments in the record for its claim construction. *Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 905 (Fed. Cir. 2018) (rejecting an argument that the Board's analysis was insufficient because the Board's analysis was commensurate with the Patent Owner's arguments below). For example, the Board's analysis is focused on the amendment that added the "assessing" limitation during prosecution (Appx6-7), which is the *only* piece of intrinsic evidence that Genentech engaged. Appx177-180. Indeed, at oral argument, Genentech did not

focus on extrinsic evidence but on the prosecution history. Appx291 ("the parties agree what happened in the prosecution is the single most important piece of intrinsic evidence in this case"). In view of Genentech's own focus on the prosecution history in the proceeding below, its critique of the Board for doing the same rings hollow.

Moreover, the Board is not required to address every single piece of extrinsic evidence offered by each party in order to provide a proper analysis. *See Yeda Res. & Dev. Co. v. Mylan Pharm. Inc.*, 906 F.3d 1031, 1046 (Fed. Cir. 2018) ("the Board is 'not require[d] . . . to address every argument raised by a party or explain every possible reason supporting its conclusion'") (quoting *Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1322 (Fed. Cir. 2016), *overruled on other grounds by Aqua Prods., Inc. v. Matal*, 972 F.3d 1290, 1296 n.1 (Fed. Cir. 2017) (en banc)); *see also Novartis AG v. Torrent Pharm. Ltd.*, 853 F.3d 1316, 1328 (Fed. Cir. 2017) ("[T]his court has said on multiple occasions that failure to explicitly discuss every issue or every piece of evidence does not alone establish that the tribunal did not consider it."). And it is perfectly appropriate for the Board to have credited the intrinsic evidence presented by the parties over Genentech's extrinsic evidence in the form of Dr. Morse's conclusory opinions.[3] *See, e.g.*,

[3] That is especially true considering that the standard for claim construction is the "broadest reasonable construction in light of the specification of the patent." Appx4 (citing *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2132, 2144-46 (2016)).

Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364, 1369 (Fed. Cir. 2005) ("[t]o reach a proper construction, the district court must look first to the claims, the specification, and the prosecution history, and *if further guidance is needed*, the extrinsic evidence, such as dictionaries and expert opinions") (emphasis added). Thus, the Board properly considered the evidentiary record with respect to claim construction, made determinations about what it found persuasive, and clearly explained its analysis.

4. Remand over the Board's claim construction analysis is not warranted here

The cases cited by Genentech do not support its argument that the Board's analysis is insufficient or its request for remand because those cases have different fact patterns that are not instructive here. In *Gechter*, *CSR*, and *Anchor*, the Board or district court did not construe claim terms that were then found to exist in the prior art. In *Gechter*, the Court explained that meaningful review was not possible, in part, because "the Board opinion does not separately construe the term 'agent status messages' before finding that Canale discloses just such 'agent status messages.'" *Gechter v. Davidson*, 116 F.3d 1454, 1460 (Fed. Cir. 1997). Similarly, the Court in *CSR* found that the Board's opinion did not permit meaningful review where "the Board erred by failing to construe 'threshold value' as it is used in claims 1-6 before finding that Smith failed to disclose a 'threshold value.'" *CSR, PLC v. SkullCandy, Inc.*, 594 F. App'x 672, 678 (Fed. Cir. 2014).

In *Anchor Wall Systems*, the Court found that the lower court's opinion did not permit meaningful review where there was complete omission of a claim interpretation analysis. *Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1311 (Fed. Cir. 2003). Here, unlike in *Gechter*, *CSR*, and *Anchor Wall Systems*, the Board not only construed the claims, but clearly articulated the scope of and basis for its construction in over four pages of its decision.

Nazomi also is not instructive. 403 F.3d at 1368-71. Although the district court construed the claim, unlike in Genentech's other cases, its only basis for its construction was an effort to avoid the prior art, articulated in four sentences. *Id.* at 1368. This Court explained that "[i]n thus focusing on validity, this limited approach glosses over, if it does not ignore entirely, the intrinsic evidence . . . that must inform the court's construction." *Id*. Here, unlike in *Nazomi*, the Board articulated the evidence that it found persuasive, focusing on the intrinsic evidence, and explained the basis for its construction, as discussed above.[4]

[4] Moreover, Genentech's reliance on *In re Smith Int'l, Inc.*, 871 F.3d 1375 (Fed. Cir. 2017), *L.A. Biomedical Research Inst. at Harbor-UCLA Med. Ctr. v. Eli Lilly & Co.*, 849 F.3d 1049 (Fed. Cir. 2017), and *D'Agostino v. MasterCard Int'l Inc.*, 844 F.3d 945 (Fed. Cir. 2016) for the proposition that invalidity findings should be vacated and remanded in view of an incorrect construction is premised on its incorrect assumption that the Board's construction is inadequate. In any case, this Court has held that where an erroneous claim construction amounts to harmless error, the Court need not reverse a finding of invalidity. *Gechter*, 116 F.3d at 1457.

Importantly, the Court explained in *Nazomi* that "[t]his court rarely remands the issue of claim construction," 403 F.3d at 1371, and the only instances of remand that the Court cites are *Gechter*, discussed above, and *Graco, Inc. v. Binks Mfg.*, 60 F.3d 785, 791 (Fed. Cir. 1995), another case where the opinion was plagued by "[t]he entire omission of a claim construction analysis." *Graco, Inc.*, 60 F.3d at 791. In fact, in *Optical Disc. Corp. v. Del Mar Avionics*, this Court refused to remand even where the district court did not articulate a construction, but "inferentially set forth its view of the scope of the claims." 208 F.3d 1324, 1334 n.4 (Fed Cir. 2000). Here, the Board expressly construed the claim and properly explained the basis of its analysis. Thus, Genentech's cited case law does not support its challenge of the Board's explanation, and the Court should affirm the Board's construction.

B. Genentech Had a Full and Fair Opportunity to be Heard

Genentech's argument that it had no opportunity to argue obviousness is meritless and does not support remand. Br. at 27-29. As an initial matter, this Court recently rejected Genentech's argument under very similar circumstances in *Intellectual Ventures II LLC v. Ericsson Inc.*, 686 F. App'x 900 (Fed. Cir. 2017). There, the parties disputed the construction of a claim term. The Board adopted a construction for the first time in its Final Written Decision that was different from what either party had advocated for and applied that construction in finding the

claim unpatentable. The Court concluded that the patent owner "had notice and an opportunity to be heard" and explained "that the patent owner was on notice that construction of [the] claim term was central to the case, and both sides extensively litigated the issue." *Id*. at 905. Here too, Genentech was on notice that claim construction was central to the case.[5] The Court also noted that the patent owner had the opportunity to seek a sur-reply and a rehearing, but did not do so. That is also true here and the outcome should be the same as in *Intellectual Ventures II LLC*.

Genentech's reliance on *SAS Inst., Inc. v. ComplementSoft, LLC*, 825 F.3d 1341 (Fed. Cir. 2016) is misplaced. *SAS*, in fact, confirms the Board's ability to adopt a construction for the first time in the Final Written Decision. In *SAS*, the Board provided a claim construction in the Institution Decision, under which the parties briefed the validity of the patent, and "significantly" changed its claim construction in the Final Written Decision. *Id*. at 1351. This Court explained that "[w]hat concerns us is not that the Board adopted a construction in its final written decision, *as the Board is free to do*, but that the Board 'change[d] theories in midstream.'" *SAS*, 825 F.3d at 1351 (quoting *Belden*, 805 F.3d at 1080) (emphasis

[5] For example, Genentech admitted invalidity under Hospira's construction. Appx178-179 (admitting anticipation under Exhibit 1005, which is Kabbinavar); *see also* Appx1575-1577.

added).[6] Here, the Board did not adopt a construction for the "assessing limitation" in its Institution Decision, and thus did not change theories midstream. Appx140. Rather, it adopted a construction in the Final Written Decision after it had both parties' proposed constructions, "as the Board is free to do." *SAS*, 825 F.3d at 1351.[7]

Genentech does not identify any different arguments that it would have made under the Board's claim construction. Additionally, the Board did not construe the claims until the Final Written Decision because Genentech chose to hide its competing claim construction from the Board and Hospira until after Trial Institution, thus depriving the Board of an opportunity to address the dispute at the institution stage. The Board followed the maxim that only claims in controversy need to be construed, and "only to the extent necessary to resolve the controversy." *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). Genentech chose not to create a controversy until its response, well aware that the Board speaks only twice in an IPR—at time of Trial

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[6] The Court in *Intellectual Ventures* distinguished *SAS Inst., Inc.* based on the fact that the Board in *Intellectual Ventures*, like here, did not change its theories midstream. *Intellectual Ventures*, 686 F. App'x at 906.

[7] Additionally, this Court explained in *SAS* that the Board changed its claim construction "significantly." *SAS Inst., Inc.*, 825 F.3d at 1351. In contrast, the Board's construction here is similar to Genentech's construction, as explained above (*supra* at 17-18), and as Genentech acknowledged. Br. at 35 n.11.

Institution and Final Written Decision—and thus, well aware that the Board would have to construe the claims for the first time in the Final Written Decision. Genentech should not be rewarded now for such gamesmanship.

C. The Board's Obviousness Analysis Is Proper

Genentech challenges the Board's obviousness holding by arguing that the Board's explanation of its analysis is insufficient. Genentech is plainly wrong. The Board identified the parties' evidence that it found persuasive and clearly explained why the claims are obvious in view of that evidence, permitting meaningful review. Further, the Board did not err in concluding that Genentech did not raise a secondary considerations argument since, in fact, no cognizable argument was raised. Lastly, the cases that Genentech cites to are not instructive here and do not support Genentech's arguments or request for remand. For these reasons, which are explained in greater detail below, this Court should affirm the Board's finding of unpatentability because the claims are obvious over the prior art of the instituted grounds and reject Genentech's request for remand.

1. The Board properly considered the parties' evidence

The Board identified both parties' evidence that it found persuasive in the Final Written Decision. Appx15-19. In particular, the Board identified Genentech's arguments that it considered and cited to the underlying evidence. *See* Appx18-19. For example, the Board considered Genentech's argument that

the prior art does not "disclose or suggest any potential association between bevacizumab and GI perforations that might lead the POSA to assess a patient specifically for GI perforation," and thus the prior art would not have encouraged physicians prescribing bevacizumab to take any steps toward diagnosing GI perforation. Appx18. The Board also considered Genentech's argument that "the standard of care for evaluating a patient would not have involved ordering 'diagnostic steps to confirm the presence of hundreds of medical problems in each cancer patient,' and in particular, GI perforation." Appx18-19. And the Board considered Genentech's argument that the infrequent occurrences of GI perforation in GI cancer patients would not have driven the person of ordinary skill in the art to assess such patients for GI perforations. Appx19. Additionally, the Board clearly considered the NCI letter, as demonstrated by its questioning during oral argument. *See, e.g.*, Appx316. Further, the Board correctly explained that Genentech "does not dispute that a physician would have evaluated a cancer patient during treatment for possible adverse events" (Appx18) and that "Genentech acknowledges that Kennedy & Spence discloses that GI perforation is among the 'most common [GI] emergencies in cancer patients.'" Appx19. Thus, the Board considered Genentech's main arguments and supporting evidence as well as its contrary admissions.

2. The Board properly explained its obviousness analysis

Genentech's assertion that the Board's analysis is "conclusory" is incorrect, and the arguments that Genentech relies on to support its assertion are unpersuasive. *See* Br. at 29. Rather, the Board properly explained its obviousness analysis. Appx19-21. The Board first explained that there is no dispute that the prior art of the instituted grounds "disclose a method of treating cancer in a patient comprising administering an effective amount of bevacizumab." Appx19. The Board next systematically explained why the person of ordinary skill in the art would have modified the disclosures in the prior art to include "assessing the patient for gastrointestinal perforation." *Id*. The Board concluded that "a person of ordinary skill in the art would have had adequate reason to assess patients with colorectal cancer receiving bevacizumab in combination with chemotherapeutic agents, such as the patients disclosed in [the prior art], for GI perforation." Appx19-20. In reaching its conclusion, the Board credited the testimony of Hospira's expert and cited to Dr. Neugut's testimony:[8]

> In reaching this conclusion, we *credit* the testimony of Hospira's expert, Dr. Neugut, that the standard of care and the knowledge of a person of ordinary skill in the art would have guided a physician to assess patients receiving

[8] *See Paice*, 881 F.3d at 895-96 (citing to *Ignite USA, LLC v. CamelBak Prods., LLC*, 709 F. App'x 1010, 1015 (Fed. Cir. Oct. 12, 2017) for the proposition that "although it is usually insufficient for the Board to merely reject one side's arguments, it is sufficient for the Board to explain that it finds the other side's arguments and supporting evidence more persuasive").

> bevacizumab for GI perforation. We are *persuaded* that such an assessment necessarily begins with evaluating patients for symptoms of GI perforation, such as nausea and abdominal pain, and in the event of showing such signs, a physician would have assessed the patient for GI perforation.

Appx20 (internal citations omitted) (emphasis added). The Board then explained its specific findings that support its conclusion—specifically, its findings regarding the knowledge that would have guided the POSA and cited to the evidence in the record supporting its findings. Appx20-21. For example, the Board found that "[g]uiding that physician would have been the knowledge that GI cancers and systematic chemotherapy each were known to be causally related to GI perforation." Appx20. The Board also identified the evidence of record that it found persuasive in reaching that finding—it cited, not only to Dr. Neugut's direct testimony, but to the cross-examination testimony of Genentech's two experts that supports the Board's finding. *Id*. Specifically, the Board cited to Dr. Morse's testimony admitting that he shares the conclusions of others "that chemotherapy or drugs given with chemotherapy to people with cancer *can actually cause perforation* . . . ." Appx1182-1184 (emphasis added). The Board also cited to Dr. Levy's admission that in her own practice, she had concluded that GI tumors were the cause of GI perforations. Appx1386. The Board also cited to various prior art, including to the specific instruction in the Kennedy & Spence reference to "ask if the patient has recently received chemotherapy as this may cause perforation by

weakening the bowel at a site of tumor."[9] Appx20. Thus, there is substantial evidence in the record for the Board's finding.

Genentech challenges the Board's analysis for this finding by contending that the Board did not explain why it rejected Dr. Morse's opinion that GI perforations caused by GI cancer or chemotherapy are infrequent events and that "performing continuous diagnostic evaluations . . . is prohibitively expensive." Br. at 35-37. First, the exact rate of GI perforation in cancer patients receiving chemotherapy carries little weight, especially considering Dr. Morse's concession that cancer *is* a "factor" when assessing a patient for GI perforation. Appx1177-1178; *see supra* at 5. Second, Dr. Morse's opinion, as it relates to "*continuous diagnostic* evaluations for perforation" is not pertinent to the obviousness analysis here because neither parties' respective proposed construction, nor the Board's construction requires "*continuous* diagnostic evaluations."[10] Br. at 36. Further, Dr. Morse's opinion, as it relates to "diagnostic evaluations" being "prohibitively expensive" (*id*.), is also not pertinent because the Board did not adopt Genentech's "diagnostic steps" limitation in its construction. Because the evidence that

[9] The Board also cited to the Liaw and Hata prior art references, which instruct physicians to be alert for GI perforation in cancer patients receiving chemotherapy. (*See supra* at 7-8.)

[10] For this same reason, Genentech's argument that the Board did not discuss Dr. Neugut's opinion that he would not perform diagnostic testing on every cancer patient receiving chemotherapy, and that his opinion contradicts Hospira's argument—which it does not—is not persuasive. Br. at 37.

Genentech identifies has little, if any, relevance to the obviousness analysis under the Board's construction, there was no reason for the Board to explain why it rejected such evidence. Thus, there is nothing erroneous or improper about the Board's explanation of its finding and the evidence in support thereof.

The Board also found that a physician would have been particularly concerned with a life-threatening complication such as GI perforation because of the high death rate, citing to Dr. Neugut's testimony and the high death rate reported in Kennedy & Spence. Appx20. Genentech does not challenge this finding and does not argue that the Board did not address evidence relevant to the finding, for which there is substantial evidence.

Further, the Board found that "the physician would have known that the protein VEGF promotes GI injury repair and that a VEGF-neutralizing antibody, such as bevacizumab, could impair the ability of VEGF to promote GI injury repair and thus potentially exacerbate GI tissue injury caused by chemotherapy," citing to the Matsui prior art reference and Dr. Neugut's testimony regarding Matsui.[11] Appx20-21. Genentech challenges the Board's analysis contending that the Board did not discuss Dr. Morse's opinion that Matsui is not analogous prior art because

[11] *See Paice*, 881 F.3d at 905 ("[T]he Board's decisions here cite to the relevant portions of Ford's briefing that explain how the prior art discloses the relevant claim limitations. In this context, the Board's analysis is readily discernible . . .") (internal citations omitted).

it was published in a gastroenterology journal, which is outside the field of "medical oncology." Br. at 37. But Dr. Morse's opinion is directly contradicted by the February 13, 2003 NCI letter which explains that "[p]artial delay in wound healing has been demonstrated in animal models treated with anti-VEGF antibodies," thus confirming that such reports are pertinent to Genentech's alleged discovery. Appx2039. In any case, Matsui reported a negative effect of VEGF-neutralizing antibodies[12] on GI injury repair, which is on its face pertinent to the field of Genentech's alleged invention—*i.e.*, the purported discovery of a possible GI-related adverse effect of a VEGF-neutralizing antibody. Thus, the Board did not err by not directly addressing this aspect of Dr. Morse's opinion.

Genentech also argues that the Board did not discuss Dr. Morse's opinion that "the POSA would not extrapolate from the article's observed *association between VEGF and the healing of existing gastric tissue damage* in rats to a conclusion that human bevacizumab patients should be assessed for GI perforation caused by administration of the anti-VEGF drug" because the POSA would have needed to make a number of assumptions. Br. at 37-38 (emphasis added). As an initial matter, the relevant teaching in Matsui relates to *the ability of VEGF-neutralizing antibodies to impair GI injury repair*, which the Board relied on. Appx20-21. Although Dr. Morse opined that the POSA would not have made the

[12] Bevacizumab is a VEGF-neutralizing antibody. (*See supra* at 8.)

assumptions that he speculates, he provided no explanation for why that is the case. *See* Appx1597-1598. Dr. Morse's opinion is again directly contradicted by the February 13, 2003 NCI letter, which recognizes the relevance of such studies (Appx2039) as well as Dr. Neugut's opinion that "the POSA would have considered that bevacizumab could have a similar effect in cancer patients" (Appx1084), cited by the Board. Appx21. In view of the conclusory nature of Dr. Morse's opinion and the contradictory evidence, the Board's analysis is proper.[13]

Genentech also attempts to discredit the Board's obviousness analysis by erroneously arguing that there is conflicting evidence that the Board should have addressed, but did not. For example, Genentech challenges the Board's statement crediting Dr. Neugut's testimony that the standard of care would have guided a physician to assess patients receiving bevacizumab for GI perforation.[14] Br. at 31. Genentech incorrectly asserts that Dr. Neugut opined "that it was the standard of care to assess all cancer patients for *all* adverse events, including GI perforations." (*Id.* (emphasis added).) Then, Genentech accuses the Board of not explaining why it credited such testimony over testimony from Dr. Neugut that he could not have

[13] The Board is not required to address every single piece of evidence offered by each party in order to provide a proper analysis in the Final Written Decision. *See Yeda Res.*, 906 F.3d at 1046; *see also Novartis AG*, 853 F.3d at 1327.

[14] For support, the Board cites to ¶¶ 92-108 of Dr. Neugut's Declaration, where he explains various aspects of the state of the art with respect to GI perforation in cancer patients and assessing for such a condition at the time of the alleged invention. Appx20, Appx388-397.

assessed all patients for *all* adverse events, and concludes that "the Court discourages this type of behind-the-curtain evidentiary weighing." Br. at 31-32 (emphasis added).

But Dr. Neugut did not opine that it was the standard of care to assess all cancer patients for *all* adverse events, as Genentech contends. Indeed, Genentech neither quotes, nor cites, to any specific testimony to support its characterization of Dr. Neugut's opinions. Br. at 31. Rather, Genentech cites to numerous pages from Dr. Neugut's Declaration and Supplemental Declaration in search of support. *Id*. Moreover, Genentech does not point to anything in the record indicating that the Board understood that Dr. Neugut had proffered such an opinion, never mind that the Board relied on it. *Id*. In the portions of Dr. Neugut's declarations that Genentech identifies, Dr. Neugut describes the standard of care in the art at the time of the alleged invention with respect to assessing cancer patients for GI perforation and how that would have guided the POSA to assess cancer patients receiving bevacizumab for GI perforation, as the Board explained. Appx20. In view of Dr. Neugut's actual opinions, there is no conflicting testimony and thus no reason why the Board would have addressed the evidence that Genentech identifies. Thus, there was no "behind-the-curtain evidentiary weighing." Br. at 31-32.

Next, Genentech takes one of the Board's very clear and straightforward statements,[15] provides two alternative inaccurate interpretations, and then accuses the Board of not addressing evidence inconsistent with Genentech's straw-man interpretations. Br. at 32-34. The first proposed interpretation is that the Board means that an assessment for GI perforation occurs when the physician finds nausea or abdominal pain. Br. at 32-33. But that interpretation is clearly erroneous because the Board simply described how the assessment "begins." The second proposed interpretation is that the Board means "that the POSA would have conducted a 'targeted investigation' for GI perforation on any bevacizumab patient presenting with nausea or abdominal pain." Br. at 33. In view of the latter interpretation, Genentech argues that there is no evidence in the record supporting that either nausea or abdominal pain alone would be sufficient to lead the physician to additional testing and that the evidence established the opposite. (*Id*.) But the Board did not say that it found that nausea or abdominal pain *alone* would have led the POSA to do additional testing. Rather, it merely listed "nausea" and

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[15] The Board stated:

> We are persuaded that such an assessment necessarily *begins* with evaluating patients for symptoms of GI perforation, *such as nausea and abdominal pain*, and in the event of a showing of such signs, a physician would have assessed the patient for GI perforation. *Id.* at ¶¶ 92–94.

Appx20 (emphasis added); Br. at 32.

"abdominal pain" as non-exhaustive *examples* of symptoms of GI perforation that a physician would have considered, which is undisputed in the record. Thus, the Board's obviousness analysis is not erroneous and its explanation of its ruling is proper.

3. The cases Genentech relies on do not support remand over the Board's obviousness analysis

The cases cited by Genentech do not support its argument that the Board's analysis is improper or its request for remand because those cases have different fact patterns that are not instructive here. In *Power Integrations, Inc. v. Lee*, this Court vacated and remanded the Board's claim construction and anticipation holdings because the Board's claim construction analysis was improper, where it ignored a district court's different construction and "fundamentally misconstrued" the patent owner's claim construction argument. 797 F.3d 1318, 1323-25 (Fed. Cir. 2015). Neither circumstance exists here.

In *Google Inc.*, this Court concluded that the Board's obviousness analysis was improper, where "the Board merely stated that it considered 'all evidence and arguments' and '[agreed] with [IV].'" 701 F. App'x at 954. Indeed, the Board stated a few conclusory findings without identifying any of the evidence that it relied on to reach those findings and without citing to the record. *See Google Inc. v. Intellectual Ventures II LLC*, Case IPR2014-00787 (PTAB Nov. 20, 2015) (Paper 53 at 24-25). Here, the Board identified specific testimony that it credited

(Appx20) and for each finding, it cited to multiple pieces of evidence in the record, including admissions by Genentech's experts on cross-examination. Appx20-21.

In *Cutsforth, Inc. v. MotivePower, Inc.*, this Court found that the Board's obviousness analysis was improper where the Board described the parties' arguments, but "stated no independent reasons for why claim 1 is obvious nor . . . formally adopt[ed Petitioner's] arguments as its own reasoning." 636 F. App'x 575, 577 (Fed. Cir. 2016). Here, the Board credited Dr. Neugut's testimony and explained why claim 1 would have been obvious. *See, e.g.*, Appx20-21 (describing the knowledge in that art that would have guided the physician). The Court in *Cutsforth* also explained that the Board "offer[ed] no explanation for why a person of ordinary skill in the art would [modify the prior art] to create [the claimed invention]." 636 F. App'x at 578. Here, the Board explained that the POSA would have been guided by the standard of care and identified the knowledge in the art that would have led the POSA to modify the teaching in Kabbinavar to assess for GI perforation, and cited to the evidence in the record. S*ee, e.g.*, Appx20 ("Guiding that physician would have been knowledge that GI cancers and systemic chemotherapy each were known to be causally related to GI perforation.").

In *Rovalma, S.A. v. Bohler-Edelstahl GmbH & Co. KG*, this Court found the Board's obviousness analysis improper, where the Board made determinations "[b]ut . . . did not explain the evidentiary basis for those determinations," and

where the petitioner "did not provide any explanation . . . that the Board could adopt as its own."[16] 856 F.3d 1019, 1025 (Fed. Cir. 2017). The Court also explained that the Board did not adequately explain why the POSA would have been motivated to practice the claimed invention. *Id*. In *In re Van Os*, this Court found the Board's obviousness analysis improper, where the analysis hinged on the finding that the POSA would have been motivated to combine the prior art, and the Board concluded "without further discussion, that the combination . . . would have been 'intuitive.'" 844 F.3d 1359, 1361-62 (Fed. Cir. 2017). The Court explained that "[a]bsent some articulated rationale, a finding that a combination of prior art would have been 'common sense' or 'intuitive' is no different than merely stating the combination 'would have been obvious.'" In *In re Nuvasive, Inc.*, this Court found the Board's obviousness analysis improper, where "the key issue" was whether it would have been obvious to combine the prior art, and the Board "failed to explain the reason why a PHOSITA would have been motivated to modify" the prior art. 842 F.3d 1376, 1383 (Fed. Cir. 2016). In contrast to these cases, the Board in the present case credited Dr. Neugut's testimony, explained how the POSA would have been guided by the standard of care and the knowledge in the

[16] In *Rovalma, S.A.*, the Board adopted the patent owner's construction, but then found the claims obvious based on a record where only the patent owner had provided evidence regarding multiple claim elements. *Rovalma, S.A.*, 856 F.3d at 1025.

art to modify the teaching in Kabbinavar, and cited to supporting evidence, as explained for *Cutsforth*, above. Appx20-21. Thus, the Board's obviousness analysis here does not exhibit the shortcomings this Court identified in *Power Integrations*, *Google*, *Cutsforth*, *Rovalma*, *Van Os*, and *Nuvasive*.[17]

The Board's analysis here is more akin to that in *Paice*, which this Court found sufficient. 881 F.3d 894. In *Paice*, the Court explained that "[u]nlike the Board's decisions in *Nuvasive* and *Personal Web Technologies*, the Board's decisions here cite to the relevant portions of Ford's briefing that explain how the prior art discloses the relevant claim limitations." *Id*. at 905. The Court concluded that "[i]n this context, the Board's analysis is readily discernible and sufficient . . . ." *Id*. Similarly, the Board's analysis here is readily discernible and sufficient.

In view of the Board's clear explanation of its obviousness analysis, the Court should reject Genentech's request for remand and affirm the Board's holding of obviousness over the prior art.

4. The Board did not err in concluding that Genentech failed to assert a secondary considerations argument.

Genentech's final challenge to the Board's obviousness analysis is that the Board did not consider its secondary considerations argument. Br. at 39-40.

[17] Indeed, Genentech only makes conclusory assertions that various standards recited in the cases apply here, but makes no attempt to compare the facts of those cases to the present case to suggest that the outcome here should be the same.

Genentech purported to discuss objective indicia of nonobviousness in one paragraph of its Response Paper (Appx39) and Dr. Morse mirrored that brief discussion in one paragraph of his declaration filed therewith. Appx1591-1592. Specifically, Genentech contended that the "[t]he effect of the inventors' discovery on the bevacizumab trials also serves as objective indicia of the nonobviousness of the claimed method" (Appx200) and Dr. Morse similarly opined that "[t]he changes to the bevacizumab clinical trials also function as secondary considerations of nonobviousness." Appx1591. But Genentech failed to raise a legally cognizable secondary considerations argument because it did not assert that the purported secondary consideration results from the claimed method.

This Court has long recognized a nexus requirement between the proffered evidence of secondary considerations and the alleged novel features of a claimed invention. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010) ("Our case law clearly establishes that the patentee must establish a nexus between the evidence [of indicia of nonobviousness] and the patented invention.") (emphasis added); *see also In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) ("But there is a more fundamental requirement that must be met before secondary considerations can carry the day. For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.") (internal quotations and

citations omitted). This Court has explained that "[w]here the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention." *Novartis AG v. Torrent Pharms. Ltd.*, 853 F.3d 1316, 1330 (Fed. Cir. 2017) (quoting *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011)). Proffered evidence of secondary considerations is given no weight in the absence of a nexus. *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016) ("The Board correctly determined that much of ClassCo's evidence of praise deserved no weight because it did not have a nexus to the merits of the claimed invention."). Indeed, this Court has dismissed secondary considerations arguments on lack of nexus alone. *See, e.g.*, *PharmaStem Therapeutics, Inc. v. Viacell, Inc.*, 491 F.3d 1342, 1365 (Fed. Cir. 2007).

Genentech's "secondary considerations" analysis is fundamentally based on its supposedly unexpected discovery of GI perforation as an adverse event associated with bevacizumab. The alleged increased risk of GI perforation is an inherent property of the bevacizumab molecule, not a result of or otherwise attributable to the claimed method, and certainly not to the "assessing" limitation that Genentech alleges is the novel feature.[18] *See Prometheus Labs., Inc. v. Roxane*

[18] Even if the alleged increased risk of GI perforation could be described as an inherent property of administering bevacizumab to a cancer patient, it still does not

Labs., Inc., 805 F.3d 1092, 1102 (Fed. Cir. 2015) (affirming the obviousness holding below and endorsing the district court's reasoning that "it is clear that many of the benefits touted by Prometheus were attributable to the compound itself rather than the '770 patent's method of treatment"). Consequently, the NCI's reaction was to an allegedly inherent property of bevacizumab, not to the claimed method and certainly not to the "assessing" limitation, which is what Genentech contends is the novel feature of the claim.[19] *See Novartis AG*, 853 F.3d at 1330. Notably, the issue here is not simply that Genentech did not proffer any evidence to support a nexus argument—which it did not—but more fundamentally, that Genentech did not even assert that there is a nexus. Therefore, the problem with Genentech's purported evidence of secondary considerations is not merely that Genentech made an *insufficient* showing to overcome the prima facie case of obviousness. It fails because it is *facially deficient* in the absence of any assertion of nexus. *ClassCo, Inc.*, 838 F.3d at 1220.[20]

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arise from what Genentech alleges is novel about the claimed method—*i.e.*, the "assessing" step.

[19] Indeed, as Hospira explained at oral argument, the NCI letter did not recommend that physicians assess patients receiving bevacizumab for GI perforation. Appx316. And Dr. Morse confirmed that even years later the label for Genentech's bevacizumab product does not require physicians to assess patients for GI perforation. (*See* Appx1154, *supra* at 13-14.)

[20] For this reason, Genentech's reliance on this Court's decisions in *Leo Pharm. Prod., Ltd. v. Rea*, 726 F.3d 1346 (Fed. Cir. 2013), *Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829 (Fed. Cir. 2015), and *Ruiz v. A.B. Chance Co.*, 234 F.3d 654 (Fed. Cir. 2000) for the propositions that secondary considerations "play a critical role"

Because there was no cognizable secondary considerations argument in the record for the Board to consider, its statement that Genentech raised no such argument is de facto correct, and cannot serve as the basis for any assertion of error regarding the Board's obviousness conclusion. At the very least, the Board's statement would amount to harmless error and does not impact the outcome of the Board's obviousness analysis.

II. ALTERNATIVELY, CLAIMS 1-5 ARE UNPATENTABLE BASED ON HOSPIRA'S CONSTRUCTION WHERE GENENTECH ADMITTED INVALIDITY UNDER HOSPIRA'S CONSTRUCTION

If the Court disagrees with the Board's claim construction, it should adopt Hospira's proposed construction and find claims 1-5 unpatentable. The record below establishes that Hospira's proposed construction for the "assessing" limitation is the broadest reasonable construction in light of the specification of the patent. Further, Genentech has admitted that the claims are anticipated by at least Kabbinavar under Hospira's construction. Thus, the Court should affirm the Board's unpatentability holding under Hospira's construction.

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and "must always be considered when present" is misplaced. Br. at 41. The key language is "when present." Here, secondary considerations were *not* present because Genentech failed to proffer a cognizable argument for the Board to consider.

A. Hospira's Construction Is the Broadest Reasonable Construction in View of the Specification

Hospira proposed that the step of "assessing the patient for gastrointestinal perforation" in claim 1 should be construed to mean "evaluating the patient in any way that may provide information about whether the patient may be experiencing a GI perforation" (Appx84) and explained in its briefing why its proposed construction is the broadest reasonable construction in view of the specification. Appx63-132, Appx210-241. Hospira explained that the specification and prosecution history support its construction. Appx84-86, Appx221-224. For example, the specification does not teach any specific methods of assessing for GI perforation or any specific signs or symptoms thereof. Indeed, Genentech argued during prosecution that the newly added "assessing" limitation has support because "the instant application describes *generally* how safety was assessed in patients being treated with bevacizumab in the clinical trial described in Examples 1 and 2." Appx999 (emphasis added). Hospira's construction is commensurate with that general disclosure because it is not limited to any particular type of evaluation or any particular signs or symptoms. Appx221-222.

Further, the "Safety Assessments" passages in Examples 1 and 2 of the patent (Appx57, Appx60) are informative, if not determinative, of the meaning of the "assessing" limitation, not only because they provide the only description of safety assessments in the patent, but because Genentech, *itself*, identified those

passages as providing the required written description support for the newly added "assessing" limitation during prosecution. Appx997, Appx999-1000. Dr. Neugut explained that those passages disclose performing routine medical evaluations of cancer patients, such as measuring vital signs and performing laboratory testing. *See* Appx1070. The scope of that disclosure is consistent with Hospira's construction, which is not limited to any specific testing for any specific signs or symptoms of GI perforation. Appx222-223. Thus, Genentech's assertion that the "amendment makes clear that the amended claims do not cover routine examinations of patients, in clinical trials or otherwise, as that is all that Gordon disclosed" is wrong. Appx178-179. It cannot be correct considering that Genentech pointed to the safety assessments sections of the clinical studies reported in the patent, which describe *only* routine examination of patients in clinical trials, for written description support for the "assessing for" language. Appx997, Appx999-1000.

Additionally, Hospira explained that the prosecution history related to the addition of the "assessing" limitation (Appx980-1003) is consistent with its construction. Appx223. For example, the Examiner's rationale for the Section 112 new matter rejection of "monitoring the patient for signs or symptoms" in pending claim 47 supports Hospira's construction. *Id*. The Examiner had rejected amended claim 47 under 35 U.S.C. § 112 because the new limitation "monitoring

the patient for signs or symptoms of gastrointestinal perforation during treatment with the anti-VEGF antibody" constituted new matter without proper written description in the specification. Appx982-983, *see* Appx223. The Examiner explained that the cited support for the new claim "*does not disclose any signs or symptoms* of gastrointestinal perforation, or *methods comprising monitoring patients for signs or symptoms* of gastrointestinal perforation." Appx984-985 (emphasis added). Genentech replaced "monitoring . . . for signs or symptoms" with the "assessing" language. Appx999. Therefore, Genentech and the Examiner understood that the "assessing" limitation is not limited to performing any particular method of evaluation or evaluating for any particular symptom or sign. Hospira's construction, which is also not limited to performing any particular method of evaluation or evaluating for any particular symptom or sign, reflects that understanding.

Hospira's construction is not inconsistent with the prosecution history surrounding the Section 102(b) anticipation rejection over Gordon, as Genentech argued. Appx177-180. The prosecution history shows that the replacement of "monitoring for signs or symptoms of " with "assessing . . . for" was not intended to change the scope of the claims. For example, the interview summary prior to Genentech's amendment explained that the Examiner discussed "finding an *alternative term* for 'monitoring'" (Appx992 (emphasis added)) because the

Examiner had found that there is no written description support for the monitoring limitation. Appx984-985. Consequently, in the subsequent amendment, Genentech explained that it amended the pending claim that issued as claim 1 "to *more particularly point out* the claimed subject matter applicants intend to pursue in this application." Appx997 (emphasis added). Indeed, Genentech did not concede during prosecution that Gordon teaches "monitoring for signs or symptoms," but simply stated that Gordon does not anticipate without arguing that the amendment overcame the pending rejection over Gordon.[21] Appx1002-1003, *see* Appx276-278. Therefore, Genentech's argument that "Genentech and the Examiner drew a distinction between assessing for GI perforation itself and merely looking for symptoms that could be consistent with this condition" is wrong. Appx178, Appx276-278.

Lastly, claim 1 should not be construed to require Genentech's intent limitation.[22] Genentech did not identify any intrinsic evidence to affirmatively support the requirement that the assessment must be performed for the purpose of determining whether a GI perforation exists (Appx1072); no such evidence exists. Appx1070-1072. The specification does not teach how the GI perforations were

[21] Nor did the Examiner suggest that the amendment was necessary to overcome the pending anticipation rejection over Gordon. Appx1009, *see* Appx278.
[22] Hospira explained why it is improper to import Genentech's proposed "diagnostic steps" limitation above. (*Supra* at 18-20.)

identified, never mind that the reported cases of GI perforation were identified through an assessment that was performed for the purpose of determining whether a GI perforation exists. *See* Appx1070-1072, Appx1240-1241. Nor did Genentech point to any such teaching. In fact, Genentech's expert suggested that they could have even been identified post-mortem. Appx1242, *see* Appx1072. And there was no mention of intent by the Examiner or Genentech during the prosecution history, and thus no indication that Genentech understood that the claims were limited only to instances where the physician performed the "assessing" step specifically for the purpose of looking for a GI perforation. Rather, the only evidence in the record supporting an intent requirement is extrinsic evidence in the form of Dr. Morse's conclusory opinions. *See* Appx181, Appx182 (citing only to Dr. Morse's opinions). But those opinions were countered by Dr. Neugut, who explained how Genentech's intent requirement "is disconnected from the reality of actual medical practice." Appx1068. This Court has cautioned against importing limitations from embodiments in the specification. *See Superguide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). Here, the intent limitation would not even be imported from the specification; it would be imported from Dr. Morse's conclusory opinions. It cannot be that the "broadest reasonable interpretation in view of the specification" is one that is based on disputed expert opinion with no intrinsic evidence support.

B. The Parties Agree that the '115 Patent Is Invalid Under Hospira's Claim Construction

Genentech did not dispute below, and does not dispute now, the invalidity of the '115 Patent claims according to any of the Instituted Grounds under Hospira's construction for the "assessing" limitation. In fact, Genentech expressly admitted that the claims are anticipated by Kabbinavar under Hospira's construction. Appx178-179 (admitting anticipation under Kabbinavar); *see also* Appx1575-1577. Moreover, the Board correctly found that Genentech did not assert that there are other limitations in claim 1 or dependent claims 2 to 5 that are not described in Kabbinavar or that render claims 1 to 5 nonobvious in view of Kabbinavar or the 2000 Press Release under Hospira's construction. Appx19. Thus, under Hospira's construction, it is undisputed that Kabbinavar anticipates claims 1 to 5 and Kabbinavar and the 2000 Press Release each render claims 1 to 5 obvious.

III. CONDUCTING IPR OF PRE-AIA PATENTS IS CONSTITUTIONAL

Genentech's argument that "[t]he retroactive application of inter partes review to a patent issued before that procedure existed is unconstitutional, a taking without just compensation and a denial of due process" (Br. at 41) is baseless. As an initial matter, the application of IPR to patents issued pre-AIA is not a retroactive application of the law because it does not attach new legal consequences to pre-AIA conduct. *See Landgraf v. USI Film Prods.*, 511 U.S. 244, 269-70 (1994) ("the court must ask whether the new provision attaches new

legal consequences to events completed before its enactment"). Rather, the Board "considers the same statutory requirements that the PTO considered when granting the patent." *Oil States Energy Services, LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1374 (2018). Further, in enacting IPR, Congress merely allocated jurisdiction to the USPTO and prescribed the procedure governing the USPTO's reconsideration of patents. *See Landgraf*, 511 U.S. at 275 ("Because rules of procedure regulate secondary rather than primary conduct, the fact that a new procedural rule was instituted after the conduct giving rise to the suit does not make application of the rule at trial retroactive.").

Further, even if IPR were a retroactive application of the law, it would not constitute a taking without just compensation or a denial of due process. The application of IPR to pre-AIA issued patents serves "a rational legislative purpose." *See Pension Ben. Guar. Corp. v. R.A. Gray & Co.*, 467 U.S. 717, 730 (1984). For example, "inter partes review protects 'the public's paramount interest in seeing that patent monopolies are kept within their legitimate scope.'" *Oil States*, 138 S. Ct. at 1374 (quoting *Cuozzo Speed Technologies, LLC v. Lee*, 136 S. Ct. 2131, 2144 (2016)). This Court has explained that "Congress sought to 'provid[e] a more efficient system for challenging patents that should not have issued' and to 'establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation

costs.'"[23] *MCM Portfolio LLC v. Hewlett-Packard Co.*, 812 F.3d 1284, 1290-91 (2015) (quoting H.R.Rep. No. 112–98, 2011 U.S.C.C.A.N. 67, 69, at 39–40). Thus, Congress authorized IPR of pre-AIA patents in order to "correct mistakes" and to "give comprehensive effect to a new law Congress considered salutary." *Landgraf*, 511 U.S. at 268. Indeed, Genentech has not even attempted to meet its burden of establishing that Congress acted in an arbitrary and irrational way in enacting the IPR statute. *See Pension*, 467 U.S. at 729.

Genentech argues that the termination of its patent rights based on "retroactive" legislation interfered with its investment-backed expectations. Br. at 43. Specifically, Genentech suggests that it disclosed a discovery that it might otherwise have kept secret because its "settled expectations at the time did not include being subject to the subsequently enacted *inter partes* review process."[24] (*Id*.) Genentech's argument fails because all patent owners who have applied for a

[23] Genentech sought these benefits when it availed itself of the IPR process in order to challenge the validity of a patent in *OSI Pharmaceuticals & Genentech, Inc. v. Arch Development Corp. & Dana-Farber Cancer Institute, Inc.* (Case IPR2016-01034). And in the pending appeal before this Court, Genentech is relying on the government's briefing in support of the constitutionality of IPR. *Arch Development Corp. et al. v. OSI Pharmaceuticals, LLC*, No. 18-1485, D.I. 57 at 11 n.1 ("petitioners defer to the government's response to ARCH's constitutional challenges").

[24] Genentech's reliance on *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002) is misplaced because there the Court addressed changes to the doctrine of equivalents and prosecution history estoppel in the Federal Circuit's opinion—*i.e.*, changes to the laws of patentability. As explained, IPR allows for the review of a patent grant under the same laws of patentability.

patent since 1981, when *ex parte* reexamination was enacted, did so with the understanding that issued patents are subject to administrative review and cancellation by the USPTO. Moreover, since *ex parte* reexamination was applied to previously issued patents, patent owners were aware that administrative review proceedings could be applied to patents that issued before their enactment. IPR differs from previously existing administrative proceedings only procedurally; the proceedings are alike in terms of the character of the governmental action, and their intended economic impact.[25]

Further, IPR does not result in the taking of constitutionally protected property rights because no such rights exist in an erroneously granted patent. It is a "bedrock requirement that the existence of a valid property interest is necessary in all takings claims." *Wyatt v. United States*, 271 F.3d 1090, 1097 (Fed. Cir. 2001); *see also, e.g.*, *Love Terminal Partners, LP v. United States*, 889 F.3d 1331, 1339 (Fed. Cir. 2018). Here, Genentech has not explained what valid property interest a patent owner has in an invalid patent that would result in an unconstitutional taking. Indeed, because IPR merely involves the reconsideration of the government's decision to grant a public franchise under the same

[25] To the extent that IPR is more litigation-like than previous administrative procedures, as Genentech appears to argue, that aspect of IPR does not interfere with patent owners' reasonable or investment-backed expectations because patents have always been subject to invalidation in federal court litigation.

patentability laws applied to the original grant, it is not an unconstitutional taking any more than the refusal of the Patent Office to grant a patent is in the first instance.[26] *See, e.g.*, *Oil States*, 138 S. Ct. at 1374 (2018) ("Inter partes review involves the same basic matter as the grant of a patent. It is a 'second look at an earlier . . . grant,' and it involves the same interests as the original grant. That inter partes review occurs after the patent has issued does not make a difference here.") (internal citations omitted).

Moreover, this Court's rationale in *Patlex Corp. v. Mossinghoff* underlying its rejection of a Fifth Amendment challenge to *ex parte* reexamination applies equally to IPR. 758 F.2d 594, 603 (Fed. Cir. 1985) (rehearing of constitutional challenges denied). In *Patlex*, the Court concluded that the overriding public purposes Congress articulated in enacting *ex parte* reexamination with retrospective effect were entitled to great weight, and that Congress did not act in an arbitrary or irrational way to achieve its desired purposes. *Id*. And in *Joy Tech., Inc. v. Manbeck*, this Court again rejected Fifth Amendment challenges to *ex parte* reexamination on the basis that *Patlex* was controlling. 959 F.2d 226, 229

[26] Genentech's reliance on *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank,* 527 U.S. 627 (1999), *Richmond Screw Anchor Co. v. United States*, 275 U.S. 331 (1928), and *Horne v. Dep't of Agric.*, 135 S. Ct. 2419 (2015) is misplaced because *Fla. Prepaid* and *Richmond Screw* involved the possible taking of infringement causes of action arising out of *valid* patents and *Horne* did not involve the taking of any patent rights. Thus, none of those cases are instructive here.

(Fed. Cir. 1992), *cert. denied*, 506 U.S. 829 (1992). Although Genentech asserts that this Court's opinion in *Patlex* does not foreclose its argument in this case, it fails to identify any material differences between *ex parte* reexamination at issue in *Patlex* and IPR that warrant a different outcome here. Br. at 44. In fact, a finding of constitutionality is even more appropriate for IPR considering that administrative procedures for reexamining patents had existed for decades when IPR was enacted, whereas no administrative proceedings existed when *ex parte* reexamination was created. Genentech's statement that "*Oil States* explicitly recognized and left open this issue" is misplaced. (*Id*. at 45.) The majority in *Oil States* pointed out that the appellant had not challenged the retroactive application of IPR or raised a due process challenge, but that does not suggest that this Court's rationale in *Patlex* does not also apply to IPR.

For these reasons, this Court should reject Genentech's argument that application of IPR to pre-AIA issued patents is a taking without just compensation and a denial of due process.

CONCLUSION

Hospira respectfully submits that the Board's Final Written Decision holding that claims 1-5 are unpatentable should be affirmed.

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CERTIFICATE OF SERVICE

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CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of Federal Circuit Rule 32(a). This brief contains 13,082 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Federal Circuit Rule 32(b).

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