Trials@uspto.gov
571-272-7822

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CELLTRION, LLC,
Petitioner,

v.

BIOGEN, INC. AND GENENTECH, INC.,
Patent Owner.

Case IPR2017-01230
Patent 7,682,612 B1

Before ERICA A. FRANKLIN, SHERIDAN K. SNEDDEN, and JACQUELINE T. HARLOW, Administrative *Patent Judges.*

SNEDDEN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Celltrion, Inc. ("Petitioner") filed a Petition to institute an *inter partes* review of claims 1–13, 15–22, and 58–60 (Paper 2; "Pet.") of U.S. Patent No. 7,682,612 B1 (Ex. 1001; "the '612 patent"). Biogen, Inc. and Genentech, Inc. ("Patent Owner") filed a Patent Owner Preliminary Response. Paper 8.

We have authority to determine whether to institute an *inter partes* review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). Upon considering the Petition and the Preliminary Response, we determine that Petitioner has not shown a reasonable likelihood that it would prevail in showing the unpatentability of claims 1–13, 15–22, and 58–60. Accordingly, we deny the Petition and decline to institute an *inter partes* review.

A. Related Proceedings

The parties inform us of no related pending litigations. Pet. 4; Paper 6.

The '612 patent is currently the subject of IPR2017-01227, filed concurrently with this proceeding by Petitioner on March 31, 2017. Petitioner also filed a petition for *inter partes* review of U.S. Patent No. 8,206,711 (IPR2017-01229), which is related to the '612 patent.

B. The '612 Patent (Ex. 1001)

The '612 patent discloses therapeutic regimens involving the administration of anti-CD20 antibodies for the treatment of chronic lymphocytic leukemia (CLL). Ex. 1001, Abst., 2:16–21. "[A] particularly preferred chimeric anti-CD20 antibody is RITUXAN® (rituximab), which is a chimeric gamma 1 anti-human CD20 antibody." *Id.* at 3:18–20.

With regard to dosing, the ’612 patent discloses that “[t]ypically effective dosages will range from about 0.001 to about 30 mg/kg body weight, more preferably from about 0.01 to 25 mg/kg body weight, and most preferably from about 0.1 to about 20 mg/kg body weight.” *Id.* at 3:50–54. “Such administration may be effected by various protocols, e.g., weekly, bi-weekly, or monthly, dependent on the dosage administered and patient response.” *Id.* at 3:55–57. “A particularly preferred dosage regimen will comprise administration of about 375 mg/m^2 weekly for a total of four infusions.” *Id.* at 3:64–66.

C. Illustrative Claims

Petitioner challenges claims 1–13, 15–22, and 58–60 of the ’612 patent. Independent claims 1, 6, and 58 are illustrative of the challenged claims and are reproduced below:

> 1. A method of treating chronic lymphocytic leukemia in a human patient, comprising administering an anti-CD20 antibody to the patient in an amount effective to treat the chronic lymphocytic leukemia, wherein the method does not include treatment with a radiolabeled anti-CD20 antibody.
>
> 6. A method of treating chronic lymphocytic leukemia in a human patient, comprising administering an anti-CD20 antibody to the patient in an amount effective to treat the chronic lymphocytic leukemia, wherein the anti-CD20 antibody is administered to the patient at a dosage of about 500 to about 1500 mg/m2, wherein the method does not include treatment with a radiolabeled anti-CD20 antibody.
>
> 58. A method of treating chronic lymphocytic leukemia in a human patient, comprising administering an anti-CD20 antibody to the patient in an amount effective to treat the chronic lymphocytic leukemia, wherein the patient is refractory to

> fludarabine previously administered for the chronic lymphocytic leukemia, and wherein the method does not include treatment with a radiolabeled anti-CD20 antibody.

D. The Asserted Grounds

Petitioner challenges claims 1–13, 15–22, and 58–60 of the '612 patent on the following grounds. Pet. 32–63.

Ground	Reference[s]	Basis	Challenged Claims
1	FDA Transcript,[1] Batata,[2] and Maloney[3]	§ 103	1–13, 15–22, 58–60
2	FDA Transcript, Batata, Maloney, Byrd,[4] and Kipps[5]	§ 103	19–20

[1] Ex. 1007, Public Hearing Transcript, Biological Response Modifiers Advisory Committee, Center for Biological Evaluation and Research, Food and Drug Administration, nineteenth meeting (July 25, 1997) ("FDA Transcript").

[2] Ex. 1008, Batata, A. & Shen, B., *Relationship between Chronic Lymphocytic Leukemia and Small Lymphocytic Lymphoma: A Comparative Study of Membrane Phenotypes in 270 Cases*, 70(3) CANCER 625-632 (Aug. 1, 1992) ("Batata").

[3] Ex. 1009, Maloney, D.G. et al., *Phase I Clinical Trial Using Escalating Single-Dose Infusion of Chimeric Anti-CD20 Monoclonal Antibody (IDEC-C2B8) in Patients with Recurrent B-Cell Lymphoma*, 84(8) BLOOD 2457-2466 (Oct. 15, 1994) ("Maloney 1994").

[4] Ex. 1010, Byrd, J.C. et al., *Old and New Therapies in Chronic Lymphocytic Leukemia: Now Is the Time for a Reassessment of Therapeutic Goals*, 25(1) Semin. Oncol. 65–74 (Feb. 1998) ("Byrd").

[5] Ex. 1055, Kipps, T.J. *Chapter 106: Chronic lymphocytic leukemia and related diseases*, in Williams Hematology Fifth Edition, 1017–1039 (Beutler, E. et al., eds., 1995) ("Kipps").

Ground	Reference[s]	Basis	Challenged Claims
3	MD Anderson Newsletter[6]	§ 102	1–7, 11–13, 15–18, 21–22, 59–60
4	MD Anderson Newsletter	§ 103	8–10, 19–20, 58
5	MD Anderson Newsletter, Byrd, and Kipps	§ 103	19–20

Petitioner supports its challenge with the Declaration of Michael Andreeff, M.D (Ex. 1005).

II. ANALYSIS

A. Claim Interpretation

We interpret claims using the "broadest reasonable construction in light of the specification of the patent in which [they] appear[]." 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs. LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under the broadest reasonable construction standard, claim terms are generally given their "ordinary and customary meaning," as would be understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech., Inc*., 504 F.3d 1249, 1257 (Fed. Cir. 2007) (quoting *Phillips v. AWH Corp*, 415 F.3d 1303, 1312 (Fed. Cir. 2005)).

Petitioner and Patent Owner propose constructions for certain claim terms. Pet. 22–24; Prelim. Resp. 15–26. We determine that no explicit construction of any claim term is necessary to determine whether to institute

[6] Ex. 1003, Archived website for Leukemia Insights Newsletter, 3(2) (Archived on February 2, 1999) ("MD Anderson Newsletter"); Petitioner contends that MD Anderson Newsletter was also available as a print version (Ex. 1061).

a trial in this case. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (Only terms which are in controversy need to be construed, and only to the extent necessary to resolve the controversy).

B. Written Description Support for Claims 2–4, 8, 10, 18–20, and 58

The '612 patent issued from an application filed on November 9, 1999, and claims priority to U.S. Provisional Application No. 60/107,658 ("the '658 provisional application"; Ex. 1002), filed on November 9, 1998. Ex. 1001. The Petitioner argues that claims 2–4, 8, 10, 18–20, and 58 are not entitled to the November 9, 1998 filing date because these claims allegedly "lack written description or enablement support in the '658 provisional application." Pet. 20.

1. Claims 2, 3, and 4

Claims 2, 3, and 4 require that the anti-CD20 antibody is administered at a dosage of "about 0.001 to about 30 mg/kg," "about 0.01 to about 25 mg/kg," and "about 0.1 to about 20 mg/kg," respectively. Ex. 1001, 8:1–9. Petitioner argues claims 2, 3, and 4 are not entitled to the '658 provisional application filing date because "there is not a single example, reference study, or any demonstrated results indicating to a person of skill in the art that the inventors had possession of any therapeutic dose for treating CLL below 375 mg/m^2 (equivalent to approximately 10 mg/kg) to support the inclusion of such doses in the claims. Pet. 20–21 (citing Ex. 1005 ¶ 60).

We are not persuaded. As Patent Owner notes, the '658 provisional application discloses methods of treating CLL with anti-CD20 antibody (Ex. 1002, 004–005) and, with regard to dosages, discloses as follows:

> Typically effective dosages will range from about 0.001 to about 30 mg/kg body weight, more preferably from about 0.01 to 25 mg/kg body weight, and most preferably from about 0.1 to about 20 mg/kg body weight.

Ex. 1002, 009; Prelim. Resp. 13. These ranges correspond expressly to the ranges found in claims 2, 3, and 4. Accordingly, we see no merit in Petitioner's contentions.

2. Claims 18, 19, and 20

Claims 18, 19, and 20 require that the anti-CD20 antibody is administered "weekly for about 2 to 10 weeks," "biweekly," and "monthly," respectively. Ex. 1001, 8:46–52. Petitioner contends that claim 18 is not entitled to the '658 provisional application filing date because "[t]here is not a single example, reference study, or demonstrated results indicating that the inventors had possession of a dosage regimen for treating CLL that involved weekly administration of an anti-CD20 antibody for any duration other than 4 weeks." Pet. 21–22 (citing Ex. 1005 ¶ 60). We are not persuaded. The '658 provisional application states that "[t]ypically, treatment will be effected weekly, for about 2 to 10 weeks," as expressly required by claim 18. Ex. 1002, 009. Accordingly, we see no merit in Petitioner's contentions.

With regard to claims 19 and 20, Petitioner asserts that "[b]iweekly and monthly dosing [limitations] are not discussed at all in the context of treating CLL." Pet. 22. Again, we see no merit in Petitioner's contentions. The '658 provisional application describes such dosing in the context of administration of a therapeutic anti-CD20 antibody to treat hematologic malignancies characterized by high numbers of tumor cells in the blood. Ex.

1002, 004–005. The '658 provisional application expressly states that "[t]hese malignancies include, in particular, CLL" and that "[s]uch administration may be effected by various protocols, e.g., weekly, bi-weekly, or monthly, dependent on the dosage administered and patient response." *Id*. at 005, 009. Accordingly, we find the '658 provisional application to adequately disclose the subject matter of claims 19 and 20. *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) ("the test for [written description] sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.").

3. Claim 8

Claim 8 requires administering the anti-CD20 antibody to a patient who "has relapsed following previous treatment for the chronic lymphocytic leukemia." Ex. 1001, 8:23–25. Petitioner contends that the '658 provisional application makes no mention whatsoever of treating patients who relapsed following treatment for CLL. Pet. 21. Patent Owner does not dispute this contention and fails to direct us to a disclosure in the '658 provisional application that would provide written description support for the subject matter of claim 8. Accordingly, for the purposes of this decision, we find that claim 8 lacks written description support in the '658 provisional application and is entitled to a priority date of November 9, 1999, the filing date of the application that matured into the '612 patent.

4. Claims 10 and 58

Claims 10 and 58 require administering the anti-CD20 antibody to a

patient who "is refractory to fludarabine." Ex. 1001, 8:29–30, 10:36–42. Petitioner contends that the '658 provisional application is silent regarding treatment of CLL patients who are refractory to fludarabine. Pet. 21. Patent Owner does not dispute this contention and fails to direct us to a disclosure in the '658 provisional application that would provide written description support for the subject matter of claims 10 and 58. Accordingly, for the purposes of this decision, we find that claims 10 and 58 lack written description support in the '658 provisional application and are entitled to a priority date of November 9, 1999, the filing date of the application that matured into the '612 patent.

C. Challenges Based on FDA Transcript

Petitioner's Obviousness Grounds 1 and 2 rely on FDA Transcript. Pet. 32–54. Before turning to the merits of these challenges, we address Patent Owner's contention that Petitioner failed to establish that FDA Transcript was sufficiently available to the public to constitute a printed publication. Prelim. Resp. 27–31.

To qualify as a "printed publication," a reference "must have been sufficiently accessible to the public interested in the art" before the critical date. *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989). Whether a reference is publicly accessible is determined on a case-by-case basis dependent on the "facts and circumstances surrounding the reference's disclosure to members of the public." *In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009) (quoting *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)). "A reference is considered publicly accessible if it was 'disseminated or otherwise made available to the extent that persons

interested and ordinarily skilled in the subject matter or art[,] exercising reasonable diligence, can locate it.'" *Id*. (quoting *Kyocera Wireless Corp. v. Int'l Trade Comm'n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008)); *see also*, *SRI Int'l, Inc. v. Internet Security Sys., Inc.*, 511 F.3d 1186, 1194–97 (Fed. Cir. 2008) (finding that a "paper was not publicized or placed in front of an interested public" although the paper was on a FTP server and available to anyone who managed to find it); *Groupon, Inc. v. Blue Calypso LLC*, CBM2013-00044, 2014 WL 7273564 at *11 (P.T.A.B. Dec. 17, 2014, Paper 47) (finding that a paper was not a printed publication where it "was only available for 'viewing and downloading' to members of the public who happened to know that the [] paper was there"). Petitioner bears the burden of establishing public accessibility of the prior art references it relies upon for its patentability challenges. *See Blue Calypso, LLC v. Groupon, Inc*., 815 F.3d 1331, 1350 (Fed. Cir. 2016) (finding that petitioner in an AIA proceeding "failed to carry its burden of proving public accessibility").

Having considered the evidence of record, we agree with Patent Owner that Petitioner failed to establish that FDA Transcript was sufficiently available to the public to constitute a printed publication. Petitioner relies upon a letter from Dynna Bigby from the Division of Dockets Management ("DDM") (Ex. 1054) at the FDA to support its contention that FDA Transcript is a prior art printed publication. Pet. 26. According to Petitioner, the letter establishes that (a) the FDA Transcript would have been received on August 8, 1997, the date stamped on the FDA Transcript; (b) the DDM would have made the document publicly available via the DDM Public Reading Room; and (c) access to the FDA Transcript

would have required filling out a reading room request form for the document. *Id*. Even if each of those assertions were taken as true, the record is missing a supported explanation that such availability of the FDA Transcript was in a manner and to an extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence would have been able to locate it. In other words, Petitioner has not explained how such persons may have known that this particular transcript existed and was available, upon request, in the DDM Public Reading Room. Without that information, Petitioner has not shown that the FDA Transcript is a prior art printed publication.

Consequently, the reference is unavailable as prior art to support Petitioner's obviousness Grounds 1 and 2. Thus, based on the information presented, we determine that Petitioner has not shown sufficiently that there is a reasonable likelihood that it would prevail in showing the unpatentability of any claim of the '612 patent based on any ground that relies on FDA Transcript, namely, Grounds 1 and 2 as set forth in the Petition.

D. Challenges Based on MD Anderson Newsletter

Each of Petitioner's Grounds 3–5 rely on MD Anderson Newsletter. Pet. 54–62. Relying on the testimony of its expert, Dr. Andreeff, Petitioner contends that MD Anderson Newsletter was publically available as a print version (Ex. 1061) and as an online version (Ex. 1003). Pet. 27–30 (citing Ex. 1005 ¶¶ 78–85). Although Petitioner relies on the online version of the newsletter to support its unpatentability contentions, it references the purported availability of the print version to buttress its position that the MD

Anderson Newsletter was publicly accessible.[7] *Id*.

Patent Owner responds that the MD Anderson Newsletter cannot qualify as a printed publication because Petitioner has not established a reasonable likelihood that the newsletter was publicly accessible before the November 9, 1998 priority date of the '612 patent.[8] Prelim. Resp. 31–41.

The Federal Circuit has held that "public accessibility" is "the touchstone" in determining whether a reference is a printed publication. *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986). "A given reference is 'publicly accessible' upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it." *SRI Int'l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008) (quoting *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006)).

Petitioner asserts that MD Anderson Newsletter appears in the Internet Archive Wayback Machine beginning February 8, 1999. *Id.* at 28. Petitioner submits an affidavit of Christopher Butler (Ex. 1062), Office Manager of the Internet Archive, in San Francisco, California, which is the creator of the Wayback Machine service. Pet. 27–28; Ex. 1062 ¶ 3.

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[7] Petitioner relies on the same arguments to support its contention that the MD Anderson Newsletter was publicly available before the November 9, 1999 filing date of application that matured into the '612 patent. Pet. 27–30.

[8] Patent Owner offers the same arguments against public accessibility of the MD Anderson Newsletter regardless of whether the November 9, 1998 filing date of the '658 provisional application or the November 9, 1999 filing date of the application that matured into the '612 patent applies. Prelim. Resp. 29–38.

Attached to the Butler Affidavit is Exhibit A, which includes "true and accurate copies of printouts of the Internet Archive's records of the HTML files for the URLs and the dates specified in the footer of the printout." Ex. 1062 ¶ 6. Moreover, the Butler Affidavit explains how the date of the webpage can be determined from the URL. Ex. 1062 ¶ 5. Exhibit A to the Butler Affidavit shows that the webpage disclosing MD Anderson Newsletter was archived on February 8, 1999. Based on this evidence, we are satisfied that the MD Anderson Newsletter was available on the website www.mdanderson.org as of February 8, 1999.

The availability of a reference on a website does not end the public accessibility inquiry, however. "When considering whether a given reference qualifies as a prior art 'printed publication,' the key inquiry is whether the reference was made 'sufficiently accessible to the public interested in the art' before the critical date." *Voter Verified, Inc. v. Premier Election Sols., Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012) (quoting *In re Cronyn*, 890 F.2d 1158, 1160 (Fed.Cir.1989)). "[E]vidence that a query of a search engine before the critical date, using any combination of search words, would have led to the [reference] appearing in the search results" is probative of public accessibility. *Blue Calypso, LLC v. Groupon, Inc*., 815 F.3d 1331, 1349 (Fed. Cir. 2016). Absent such evidence of indexing, various additional factors, including testimony indicating that the particular online publication in question was well-known to the community interested in the subject matter of the reference, and the existence of numerous related articles located within the same publication can support a determination of public accessibility. *See Voter Verified*, 698 F.3d at 1380–81.

In this respect, Petitioner's position is deficient. Petitioner relies on the Declaration of Dr. Andreeff to support its contention that MD Anderson Newsletter was publicly accessible by November 9, 1998. *See* Ex. 1005 ¶¶ 77–85. Dr. Andreeff testifies that

> [i]n 1998, doctors with patients seeking treatment for CLL routinely turned to MD Anderson to inquire about our ongoing clinical trials and the potential for their patients to be referred to MD Anderson for treatment as part of the trial. As part of this process, the Newsletter was disseminated to referring physicians, and they were free to share the information with their prospective patients.

Ex. 1005 ¶ 83. Dr. Andreeff further testifies that "[t]he physicians participating in the study, including myself, were [] especially motivated to spread the word about the Newsletters . . . to enroll more patients and thereby ensure the trial's success, and would have discussed the trial with referring doctors with CLL patients." *Id.* ¶ 84.

Absent from Dr. Andreeff's testimony, however, is any indication that he, or anyone else, in fact accessed or distributed the MD Anderson Newsletter. Dr. Andreeff does not, for example, provide evidence as to the number of page views for the MD Anderson Newsletter, or demonstrate that the newsletter was indexed or otherwise available via search engines during the relevant time. Nor does Dr. Andreeff testify that the MD Anderson Newsletter itself (as contrasted with the MD Anderson Cancer Center) was well-known to the community interested in the subject matter of that reference, or that numerous related articles were located within the same online publication. Furthermore, even crediting Dr. Andreeff's testimony that he and his colleagues were "especially motivated to spread the word" and "would have discussed the trial" (*id.*), absent from that testimony is any

indication that Dr. Andreeff or his colleagues did in fact discuss the edition of the MD Anderson Newsletter relied upon in this proceeding with another physician, or direct anyone to that newsletter. In addition, it is unclear from Dr. Andreeff's testimony what version of the newsletter purportedly would have been discussed with and disseminated to referring physicians, the online version presently asserted as prior art, or the print version, which is not independently proffered as prior art. Stated plainly, there is insufficient evidence to show "that a person of ordinary skill interested in [the relevant technology] would have been independently aware of [the online publication] as a prominent forum for discussing such technologies." *Voter Verified*, 698 F.3d at 1380–81.

Similarly, to the extent Petitioner seeks to rely on Dr. Andreeff's testimony that "MD Anderson printed and distributed a Summer 1998 issue of the Leukemia Insights Newsletter" (Ex. 1005 ¶ 80), which was purportedly "mailed out to several thousand referring Hematology-Oncology physicians in the United States" (*id.* ¶ 81) to support its contention that the MD Anderson Newsletter was publicly accessible, we observe that such testimony is based not on Dr. Andreeff's firsthand knowledge, but on his conversations with Sherry Pierce, R.N., who herself has not submitted a declaration in this matter. Moreover, we note that Dr. Andreeff does not testify as to when MD Anderson Newsletter was actually published. Ex. 1005 ¶ 80. Nor does Dr. Andreeff direct us to any corroborating document supporting the contention that the MD Anderson Newsletter was published in or around the Summer of 1998. *Id.* In addition, even assuming that the MD Anderson Newsletter was published in or around the Summer of

1998, such testimony does not show that the newsletter was then available to members of the interested public.

Accordingly, in view of the above, we conclude that Petitioner has failed to establish that MD Anderson Newsletter was publically accessible as of the critical date of November 9, 1998.[9] Thus, on this record, MD Anderson Newsletter fails to qualify as prior art under 35 U.S.C. § 102, and Petitioner cannot establish the anticipation or obviousness of the challenged claims based on that reference.

III. CONCLUSION

For the foregoing reasons, we conclude that the information presented in the Petition does not establish a reasonable likelihood that Petitioner would prevail in showing that claims 1–13, 15–22, and 58–60 of the '612 patent are unpatentable.

IV. ORDER

Accordingly, it is hereby:

ORDERED that Petitioner's request for an *inter partes* review of claims 1–13, 15–22, and 58–60 of the '612 patent is *denied*.

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[9] Because the above-described deficiencies in Petitioner's public accessibility argument apply, for the reasons set forth above, we likewise conclude that Petitioner has not shown that the MD Anderson Newsletter was publicly accessibility as of the November 9, 1999 critical date of claims 8, 10, and 58.

PETITIONER:

Michelle Rhyu
James Brogan
COOLEY LLP
rhyums@cooley.com
jbrogan@cooley.com

PATENT OWNER:

Michael Fleming
Gary Frischling
Keith Orso
Yite John Lu
David Gindler
Lauren Drake
IRELL & MANELLA LLP
mfleming@irell.com
gfrischling@irell.com
korso@irell.com
yjlu@irell.com
dgindler@irell.com
ldrake@irell.com