NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

FWP IP APS,
Appellant

v.

BIOGEN MA, INC.,
Appellee

2017-2109

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 106,023.

Decided: October 24, 2018

KATHLEEN M. SULLIVAN, Quinn Emanuel Urquhart & Sullivan, LLP, New York, NY, argued for appellant. Also represented by CATHERINE MATTES, ERIC C. STOPS; KEVIN ALEXANDER SMITH, San Francisco, CA.

CHARLES E. LIPSEY, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Reston, VA, argued for appellee. Also represented by BARBARA CLARKE MCCURDY, PIER DEROO, Washington, DC.

Before PROST, *Chief Judge,* WALLACH and CHEN, *Circuit Judges.*

CHEN, *Circuit Judge*

This appeal arises from an interference proceeding[1] at the United States Patent and Trademark Office, Patent Trial and Appeal Board (Board) and involves a treatment method for multiple sclerosis with a particular daily dosage—480 mg—of fumaric acid esters (fumarates). Appellee Biogen MA, Inc. (Biogen) owns U.S. Patent No. 8,399,514, which describes and claims this method of treatment. Appellant FWP IP ApS (Forward)[2] is the assignee of U.S. Patent Application No. 11/576,871, which discloses controlled release compositions of fumarates. Forward argues that its patent application describes the specific treatment method in dispute. While the Board found that Forward's '871 application had an earlier priority date than Biogen's '514 patent, it granted Biogen's motion for judgment that the MS treatment Forward now seeks to claim is not supported by adequate written description under 35 U.S.C. § 112 (2006). Because substantial evidence supports the Board's finding that Forward's '871 application does not adequately disclose a method of treating MS with 480 mg of fumarates per day, we affirm.

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[1] "A patent interference proceeding is conducted for the purpose of determining priority of invention as between competing applicants for patent on the same invention." *Vas-Cath, Inc. v. Curators of Univ. of Mo.*, 473 F.3d 1376, 1378 (Fed. Cir. 2007) (citation omitted).

[2] The original appellant in this case was Forward Pharma A/S. Following the docketing of the appeal, Forward Pharma assigned U.S. Patent Application 11/576,871 to a related entity, FWP IP ApS. We refer to FWP IP ApS and Forward Pharma A/S as Forward.

BACKGROUND

Multiple sclerosis (MS) is an autoimmune disease affecting the central nervous system. The disease attacks the myelin sheath around neural axons, causing visual loss, weakness, numbness, loss of coordination, and cognitive dysfunction among other symptoms. Treatment of MS seeks to reduce this neurodegeneration.

The MS treatment in dispute involves administering a specific daily dosage (480 mg) of fumarates, specifically dimethyl fumarate (DMF) and/or monomethyl fumarate (MMF). Forward argues that it was the first to discover and claim this method of treatment and that it has been conducting research on the use of DMF for treating "inflammatory and neurological indications, including multiple sclerosis."[3] J.A. 9094. Forward and its predecessor Aditech Pharma AB filed several patent applications, one of which is the '871 application. The '871 application is the U.S. national phase of Forward's Patent Cooperation Treat (PCT) application. The PCT application was filed October 7, 2005, and claims priority to a Danish patent application filed on October 8, 2004. Biogen, for its part, owns the '514 patent, which covers this particular method of MS treatment, and markets its drug as Tecfidera®. The '514 patent, which issued on March 19, 2013, claims priority to a provisional application filed on February 8, 2007.

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[3] Forward points to a formulation it developed: FP187. FP187 has gone through phase 1 and 2 of clinical trials, and Forward is now implementing phase 3 clinical trials to test its efficacy in patients with MS. Forward's own Securities and Exchange Commission (SEC) filing, which was included on the record below, shows that phase 1 and 2 testing was on 300 *psoriasis* patients, not MS patients.

On December 3, 2013, Forward filed an amendment to the '871 application, canceling all pending claims and adding claims 55–70 that closely tracked Biogen's then recently issued '514 patent claims. The Board declared an interference between Forward's application and Biogen's '514 patent on April 13, 2015. It designated Forward as the senior party with a constructive reduction to practice date of October 8, 2004.

On March 31, 2017, the Board granted Biogen's motion for a judgment that Forward's claims are not supported by adequate written description under 35 U.S.C. § 112. The Board found that the '871 application's focus on "controlled release fumarate compositions" and "general teaching of applicability of the fumarates to [the] treatment of a variety of possible disease or conditions and the teaching of a broad range of possible dosages would not have conveyed possession or description of the specific treatment of MS that [Forward] now claims." J.A. 3. Using Forward's newly-added claim 69[4] as illustrative, the Board distilled the claims at issue into three limitations: (1) an MS treatment, (2) by oral administration of a

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[4] Independent claim 69 provides:

> A method of treating a subject in need of treatment for multiple sclerosis comprising
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> (a) a therapeutically effective amount of dimethyl fumarate and
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> (b) one or more pharmaceutically acceptable excipients, wherein the therapeutically effective amount of dimethyl fumarate is about 480 mg per day.

J.A. 9166. The other claims (55–68, 70) cover a method of treatment that uses MMF or a combination of DMF and MMF. J.A. 9165–66.

therapeutically effective amount of DMF and/or MMF, at (3) a dosage of 480 mg per day. The Board then addressed each limitation in turn.

Reviewing the '871 application's specification, the Board found that the principal focus of the disclosure is the minimization of gastro-intestinal side-effects through the use of controlled release of fumarates. The title of Forward's '871 application is "Controlled Release Pharmaceutical Composition Comprising a Fumaric Acid Ester." '871 application, col. 1, ll. 1–2. The specification teaches that administering fumarates can cause certain undesired gastro-intestinal effects, such as "fullness, diarrhea, upper abdominal cramps, flatulence and nausea." *Id.* at col. 2, ll. 35–36. Forward's '871 application purports to address these gastro-intestinal side effects by teaching pharmaceutical compositions designed to "release the fumaric acid ester in a controlled manner so that local high concentrations of the active substance within the gastro-intestinal tract upon oral administration can be avoided and, thereby, enabling a reduction in gastro-intestinal related side-effects." *Id.* at col. 1, ll. 4–10. The specification is replete with examples of detailed controlled release compositions (pH controlled release, pH independent release, release over gradually shifting pH, etc.) for both single and multiple daily administration. *Id.* at col. 14 l. 17–col. 35 l. 19.

As to the treatment of specific diseases and conditions, the Board found that Forward's specification lists over twenty diseases and conditions, and MS is not identified as of any particular interest. This laundry list of diseases and conditions includes psoriasis; psoriatic arthritis; neurodermatitis; inflammatory bowel disease; neurodermatitis; autoimmune diseases (including MS as one of the eleven listed); pain associated with radibulopahty, neuropathy, or sciatica; organ transplantation; sarcoidosis; necrobiosis lipoidica; and granuloma annulare. *Id.* at col. 37 l. 17–col. 38 l. 17. The only diseases that

the '871 application discusses in any detail, however, are psoriasis and conditions associated with psoriasis. The two commercial compositions of fumarates the specification identifies are Biogen's Fumaderm® and TioFarma's Fumaraat 120®, both of which can be used for treating psoriasis. *Id*. at col. 1, ll. 13–15. The '871 application's specification defines "controlled release composition" as "a composition that is designed to release the fumaric acid ester in a prolonged, slow and/or delayed manner compared to the release of the commercially available product Fumaderm®." *Id*. at col. 4, ll. 25–27.

And with respect to the fumarate content, the Board found that, while the '871 application's specification teaches the active ingredient can be any fumarate, it does separately identify DMF, MMF, and their combination for use in treatment formulations such that a skilled artisan would have recognized that the inventors had considered those fumarates to be significant.

As for the claimed 480 mg/day dosage, the '871 application's specification refers to a 480 mg/day dosage three times, twice in a paragraph teaching possible daily dosages and once as an interim dose in an "up-scale" table. *See id*. at col. 36 l. 1. The daily dosage paragraph teaches that the dosage can be from 240 to 360 mg, 360 to 480 mg, 480 to 600 mg, 600 to 720 mg, 720 to 840 mg, 840 to 960 mg, or 960 to 1080 mg, given in one to three administrations. *Id*. at col. 36 ll. 13–23. The 480 mg/day dose thus is identified as both the low and high end of ranges within a broader, overall disclosed dosage range of 240 to 1080 mg/day. *Id*. Importantly, this paragraph specifically teaches that the daily dosage to be administered "depends on a number of factors, among which are included, without limitation, weight and age and the underlying causes of the condition or disease to be treated, and is within the skill of a physician to determine." *Id*. at col. 36 ll. 13–16. The disclosed up-scale table, on the other hand, is designed to minimize the side-effects of ingesting

fumarates by increasing the dose gradually over time to allow the patient to acclimate. The table proposes scaling up the daily dosage level over a nine-week period, with the 480 mg/day dosage occurring during week seven. *Id.* at col. 35 l. 21–col. 36 l. 5. So, while 480 mg/day dosage is expressly mentioned three times in the specification, the Board found that there "is no discussion that would guide one skilled in the art to treat MS with a therapeutically effective dose of 480 mg/day, or any other therapeutically effective dose within the ranges disclosed." J.A. 22.

Next, the Board rejected Forward's arguments based on *Snitzer v. Etzel*, finding that, unlike the invention in *Snitzer*, Forward's case requires selection and combination of claim elements from more than a single limited list: selection of MS from a list of diseases and selection of 480 mg/day from a large range of possible dosages. 465 F.2d 899, 903 (CCPA 1972). "[S]uch necessary picking and choosing to arrive at the claimed invention . . . does not indicate it was described." J.A. 27. The Board also rejected Forward's arguments based on *Falkner v. Inglis*, 448 F.3d 1357, 1366–68 (Fed. Cir. 2006), and *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1285–87 (Fed. Cir. 2012), for using the prior art to satisfy gaps in the written description. Forward pointed to publications to establish that the treatment of MS with fumarates was well known as of 2004. In Forward's view, a skilled artisan would have realized that the disclosure of the 480 mg/day dose in an up-scale table tied the dose, active ingredient, and disease together as an integrated whole. The Board found to the contrary. Unlike *Falkner* and *Streck*, where the prior art was used to show that a generic claim element was well-known to those working in the field, the Board found that our case law requires the specification itself to provide the blaze marks necessary to guide a skilled artisan to the claimed invention. J.A. 28 (citing *Ariad Pharm. Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010)).

Thus, the Board concluded that Forward's claims 55–70 failed to meet the written description requirement. The Board found that, even though each required claim element is mentioned separately in Forward's specification, the specification did not disclose the claimed invention in a manner that adequately describes the now-claimed MS treatment to a skilled artisan

Forward appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141.

DISCUSSION

Whether a patent claim is supported by an adequate written description is a question of fact, which we review for substantial evidence. *ULF Bamberg v. Dalvey*, 815 F.3d 793, 797 (Fed. Cir. 2016). A Board decision is supported by substantial evidence if "a reasonable mind might accept the evidence to support the finding." *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 449 (Fed. Cir. 2015) (citation omitted). A decision is supported by substantial evidence even if the record would reasonably support contradictory conclusions. *In re Jolley*, 308 F.3d 1317, 1320 (Fed. Cir. 2002).

Section 112 ¶ 1 provides that "[t]he specification shall contain a written description of the invention." 35 U.S.C. § 112. The written description requirement examines "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." *Ariad*, 598 F.3d at 1351. To demonstrate possession, the inventor must provide enough description in the specification to demonstrate that he actually invented what has been claimed—a "mere wish or plan for obtaining the claimed invention" is not enough. *Centrocor Ortho Biotech, Inc. v. Abbott Labs.*, 636 F.3d 1341, 1348 (Fed. Cir. 2011). "[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the

art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Ariad*, 598 F.3d at 1351. The written description requirement is particularly important when, as here, claims are added later during prosecution in response to development by others. *Agilent Techs., Inc. v. Affymetrix, Inc.*, 567 F.3d 1366, 1383 (Fed. Cir. 2009) ("[T]he purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not . . .").

The interference count between Biogen and Forward comprises three limitations: (1) a treatment for MS that involves administering (2) DMF, MMF, or a combination of the two fumarates at (3) a dosage of 480 mg per day.

As an initial matter, the Board found that Forward's written description "does not reveal an express description of a method that includes the specific elements now claimed connected as required by the claims." While the Board acknowledged that a skilled artisan would have recognized that Forward had considered DMF and/or MMF to be significant in treating the conditions listed in the application (including MS), it found that, contrary to Forward's position, the up-scale table did not identify 480 mg/day as a therapeutically effective dose, and the specification did not adequately tie the up-scale table to the treatment of MS.[5]

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[5] Relatedly, Forward argued that the Board misapplied written description law by applying a "heightened" blaze marks analysis. This is not so. First, the blaze marks analysis is part of the written description inquiry; it is not a heightened inquiry. The blaze marks analysis is a useful guide for evaluating laundry-list disclosures, like the one in Forward's '871 application. *See Fujikawa*

On appeal, Forward argues that the count is disclosed as an unified whole in the up-scale table because the up-scale table (1) discloses a 480 mg/day dosage, (2) is reasonably directed at using DMF to treat the listed conditions, and (3) is linked to the treatment of MS. And at oral argument, Forward again asserted that the kits for administration of fumarates over the up-titration schedule (up-scale table) tie together the dose, drug, and disease. Oral Arg. at 5:25–5:50, *available at* http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2017-2109.mp3. We are not persuaded. For the same reasons set forth by the Board, we agree that the '871 application does not disclose the now-claimed MS treatment as a unified whole. Below, we first discuss why the specification does not disclose the 480 mg/day therapeutically effective dosage for MS limitation of the count[6] and

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v. Wattanasin, 93 F.3d 1559, 1571 (Fed. Cir. 1996) ("In the absence of such blazemarks, simply describing a large genus of compounds is not sufficient to satisfy the written description requirement as to particular species or subgenuses."). Recently in *Nike, Inc. v. Adidas AG*, we explained that the written description requirement "serves the same function as 'blaze marks on the trees' to help 'find[] one's way through the woods.'" 812 F.3d 1326, 1347 (Fed. Cir. 2016) (quoting *In re Ruschig*, 379 F.2d 990, 995 (CCPA 1967)). Second, Forward's argument against the application of a blaze marks analysis is premised on the interference count being disclosed as a unified whole in the '871 application, which the Board found was not the case. We observe no unified disclosure of all three limitations of the interference count in the '871 application and thus see no reason to disturb the Board's finding.

[6] The parties spend considerable briefing analogizing to and distinguishing from our written description cases such as *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1346 (Fed. Cir. 2013), *In re*

then address Forward's arguments regarding the original claims of the '871 application.

A

Both parties agree that the key limitation of the method of treatment in dispute is the therapeutically effective dosage of 480 mg of fumarates per day to treat MS. *See* Oral Arg. at 29:39–30:00, 36:24–50. Forward contends that the up-scale table in the '871 application expressly discloses this dosage during the seventh week of a contemplated nine-week scale-up period. A skilled artisan looking at the up-scale table, Forward argues, would have recognized that *all* of the listed dosages in that nine-week up-scale table are therapeutically effective dosages for all of the conditions and diseases listed elsewhere in the specification. The Board disagreed, finding that the up-scale table does not discuss therapeutically effective dosages at all, much less the specific dosage of 480 mg of fumarates per day as being therapeutically effective for treating MS. Rather, the Board interpreted the up-scale table as simply providing guidance on gradual dosing over a period of several weeks to help patients' gastro-intestinal systems acclimate to the side-effects of fumarates.

The Board's interpretation is more than reasonable in light of the '871 application's own disclosure stating that the up-scale table is designed to help patients in "situations where increasing dosage is required over time." '871

Driscoll, 562 F.2d 1245, 1250 (CCPA 1977), and *Snitzer*, 465 F.2d at 902. But because the Board found the '871 application does not disclose 480 mg of fumarates per day to be a therapeutically effective treatment for MS—a fact finding supported by substantial evidence—we need not opine on whether this case is most like *Novozymes/Ruschig* or *Driscoll/Snitzer*.

application, col. 35 ll. 23–25. The 480 mg/day disclosure in week seven is an interim dosage, and Forward has not presented persuasive evidence why a skilled artisan would have understood the week seven interim dosage to be therapeutically effective. On the other hand, Biogen's expert testified that, because MS is a chronic disease, a skilled artisan would not have viewed a one week, interim dosage in the middle of a nine week up-scale schedule as an adequate treatment dosage, let alone one for a particular disease, such as MS.[7] Substantial evidence supports the Board's finding that Forward's '871 application lacks adequate written description support for the claimed treatment method.

Moreover, we also note that the '871 application states that its compositions and kits are merely "*contemplated* to be suitable to use in the treatment of *one or more* of the following conditions." *Id.* at col. 37 ll. 17–18 (emphases added). A reasonable understanding of this statement is that the inventors of the '871 application had not yet firmly concluded that fumarates at a particular daily dosage were in fact effective for treating the entire list of enumerated conditions, which included MS, partic-

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[7] The '871 application's specification also teaches, as noted *supra*, that the daily dosage of fumarate may be in the range of 240 to 1080 mg/day and lists 480 mg/day dosage twice in two different ranges within this broader range (discussed *supra*). '871 application col. 36 ll. 13–23. Forward does not rely on this disclosure in its written description arguments. In any case, this disclosure is not helpful to Forward because none of the dosages are specifically associated with any particular fumarate; the specification states that choosing a daily dosage is dependent on a number of factors including the underlying cause of the condition or disease to be treated; and none of the doses are identified as being therapeutically effective.

ularly in light of the disparate pathophysiologies of the listed diseases and the wide variability of the organ systems affected by them. J.A. 18298 ¶47 ("Given the disparate pathophysiologies of the listed conditions and the wide variability in the organ systems affected by them, a person of ordinary skill reading [the '871 application] would not have expected possible doses of a fumaric acid ester to similarly apply across the wide range of disease classes or even within the various classes, including within the large subclass of autoimmune diseases. For example, a person of ordinary skill in the art reading [the '871 application] would not have expected that a dose of an agent for potentially treating one of the many listed non-neurological diseases would also treat a neurological disease such as MS."). In the sixty-seven page application, MS is mentioned only a handful of times, three times as part of a list of over twenty diseases ('871 application, col. 37 l. 27, col. 39 l. 3, col. 39 l. 15) and twice in the original claims (claim 44 and 45). There is no mention of the symptoms or etiology of MS. The only conditions the '871 application's specification discusses in any detail are psoriasis and conditions associated with psoriasis. '871 application, col. 1 ll. 12–15, col. 2 ll. 23–34, col. 7 ll. 9–17, col. 38 ll. 18–27, col. 39 l. 21–col. 40 l.7. Given the brief references to MS and the lack of recognition of 480 mg/day as a therapeutically effective daily dosage, we agree with the Board's finding that there "is no discussion [in the '871 application] that would guide one skilled in the art to treat MS with a therapeutically effective dose of 480 mg/day. . . ." J.A. 22.[8]

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[8] The Board found that the focus of Forward's application "is ameliorating the gastro-intestinal side-effects due to the administration of fumarates by using controlled release preparations." J.A. 21–22. Forward argues that this finding is legal error because there is no

Forward's attempt to use the prior art to supply the link between the therapeutically effective dose of 480 mg/day and MS is similarly unpersuasive. Forward attempts to analogize to *Streck*, *Falkner*, and *Union Oil Co. of California v. Atlantic Richfield Co.*, 208 F.3d 989 (Fed. Cir. 2000), which in each case found that the prior art provided sufficient background knowledge such that a skilled artisan would understand that the specification, in the context of that background knowledge, adequately described the claimed invention.

The problem in this case for Forward is that, even if we allow Forward to rely on the prior art for establishing a prior, known link between MS and fumarates, the prior art does not teach the key limitation of the count: the 480 mg daily dosage. As discussed *supra*, both parties identified this as the key limitation in the count. Biogen argued that it was only during its phase 3 clinical trials when it confirmed that 480 mg/day of DMF is effective for

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requirement for a specification to place "focus" on an invention to meet the written description requirement, and in imposing such a requirement, the Board improperly ignored the embodiments disclosed in the '871 application that do not involve controlled research formulations. Forward's argument is unpersuasive because it misunderstands the Board's opinion. The Board did not find that the '871 application was limited to controlled release formulations. Rather, the Board found that the main thrust of the specification was aimed at controlled released formulations to reduce the gastro-intestinal side-effects of fumarates. And then the Board made the additional finding—which is supported by substantial evidence—that nothing in the specification supported Forward's assertion that a skilled artisan would understand the specification as disclosing a method of treating MS using a fumarate at a dosage of 480 mg/day.

treating MS and, unexpectedly, that it had a similar efficacy to the much higher dosage of 720 mg/day. This discovery—by Biogen—was significant because it allowed patients to take lower doses of the medication, which is important in treating a chronic disease like MS. In addition to the dosage amount problem, even if the link between MS and fumarates had been known in the prior art, that does not necessarily mean that a skilled artisan would have understood the '871 application as demonstrating that the inventor contemplated using fumarates to treat MS, given the application's open-ended language that fumarates are merely "contemplated to be suitable to use in the treatment of one or more" of several listed conditions. In view of the foregoing, Forward's prior art-based argument does not undermine the substantial evidence that supports the Board's finding that the '871 application does not disclose 480 mg of fumarates per day as a therapeutically effective dosage for treating MS.

B

Lastly, Forward briefly argues that the '871 application's original claims—which it canceled and replaced with new claims to provoke the interference proceeding—adequately describe the MS treatment it now seeks to claim. Specifically, Forward's argument is premised on piecing together elements of several of the claims—claims 27, 28, 30, 32, 33, 37, and 44. The Board rejected this argument, finding that, "to arrive at the specifically claimed subject matter, a person skilled in the art would need to pick and choose from the certain of [Forward's] claims without guidance from the written description." J.A. 24. Substantial evidence supports the Board's finding.

The '871 application had 45 original claims. Those claims are mainly directed to controlled release compositions of numerous fumarates and pharmaceutically acceptable salts. Some claims recited numerous possible

dosing schedules (claims 30–32) and dosages (claims 33–38). And others replicate the laundry list of diseases and conditions enumerated in the specification (claims 44 and 45). This large number of disease conditions, dosages, dosing schedules, active ingredients, pharmaceutical formulations for controlled release, and combinations thereof covered by the original claims detracts from Forward's argument that it possessed and invented the now-claimed, specific MS treatment. *See Ariad*, 598 F.3d at 1351. Rather, what the scale of the claims demonstrate is that Forward possessed, as of the 2004 critical date, a mere wish for obtaining some type of fumarate formulation to treat any one of a number of diseases and conditions, one of which was MS, using almost any possible daily dosage.

The task of locating the now-claimed subject matter within the original claims is made uncommonly more difficult by the original claims themselves, which are written in a cascading, multiple dependencies manner such that many of them generically refer back to any one of the preceding claims. For example, claim 44, which contains a laundry list of diseases and conditions, depends on "any one of claims 1–43." Other claims use similar language including "any one of the preceding claims" (claims 11, 27, 28) and "any one of the claims 3–12" (claim 13). In addition, claim 33 is a multiple dependent claim, and it is effectively serving as the basis for claim 37 and subsequently, claim 44. Title 35 forbids this type of claim drafting because it can—as here—lead to bizarrely complex chains of cross-referencing claims in which one multiple dependent claim impermissibly serves as a basis for other multiple dependent claims, and so on. *See* 35 U.S.C. § 112 ¶ 5 ("A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for

any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered."). Finding a treatment for MS with 480 mg of DMF and/or MMF per day in the morass of possible combinations of the impermissibly-drafted original claims would—as Judge Learned Hand observed in a different but related context—take "the patience of a yogi to decipher their meaning, as they stand." *Victor Talking Mach. Co. v. Thomas A. Edison, Inc.*, 229 F. 999, 1001 (2d Cir. 1916).

While Forward contends that locating the now-claimed invention requires just simple tracing through its now cancelled original claims, the task itself is monumental due to the complex network of cross-referencing and chain of multiple dependencies in the original claims that must be navigated. A review of the claims and their intermixing dependencies presents an overall picture of a set of claims designed to preempt a conspicuously large number of different dosage regimens for a large variety of conditions using a long list of formulations, which is disconnected from a written description that is far more limited in its disclosure. As the Board correctly observed, a skilled artisan would need to pick and choose from Forward's claims without any guidance from the written description. Forward provides no explanation as to why a skilled artisan would be able to cobble together selected elements from several different claims and thus recognize the now-claimed 480 mg/day of DMF and/or MMF for the treatment of MS from these 45 claims covering a broad scope of subject matter. This is all the more true given that the original claims, now cancelled, are drafted in a way that is barred by the Patent Act. The Board thus reasonably found that these original claims do not provide a basis for a written description of the now-claimed subject matter.

CONCLUSION

Because the '871 application does not disclose 480 mg of fumarates per day as a therapeutically effective dose for treating MS, substantial evidence supports the Board's finding that the MS treatment Forward now claims is not supported by adequate written description under 35 U.S.C. § 112. We have considered Forward's other arguments and find them unpersuasive. Therefore, we affirm the Board's decision.

AFFIRMED