

# United States Court of Appeals for the Federal Circuit

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IN RE: JEFF H. VERHOEF,  
*Appellant*

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2017-1976

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. 13/328,201.

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Decided: May 3, 2018

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THOMAS E. LOOP, Loop Intellectual Property Law  
PLLC, Seattle, WA, argued for appellant.

MEREDITH HOPE SCHOENFELD, Office of the Solicitor,  
United States Patent and Trademark Office, Alexandria,  
VA, argued for appellee Andrei Iancu. Also represented  
by NATHAN K. KELLEY, THOMAS W. KRAUSE, BRIAN  
RACILLA.

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Before NEWMAN, MAYER, and LOURIE, *Circuit Judges*.  
LOURIE, *Circuit Judge*.

Jeff H. VerHoef (“VerHoef”) appeals from the decision  
of the Patent Trial and Appeal Board (the “Board”) affirm-  
ing the examiner’s rejection of all claims of VerHoef’s

pending application 13/328,201 (the “201 application”) as unpatentable under 35 U.S.C. § 102(f) (2006).<sup>1</sup> *Ex parte VerHoef*, No. 2015-005270, 2017 WL 745052 (P.T.A.B. Feb. 23, 2017) (“*Decision*”). Because the Board correctly concluded that VerHoef did not solely invent the claimed subject matter of the ’201 application on which he claimed sole inventorship, we affirm.

#### BACKGROUND

VerHoef filed the ’201 application, generally relating to a dog mobility device, at the U.S. Patent and Trademark Office (“the PTO”), naming himself the sole inventor. The only question on appeal is whether VerHoef “himself invent[ed] the subject matter sought to be patented,” as required by § 102(f).

In response to the examiner’s initial rejection of the ’201 application under § 102(f), VerHoef submitted an affidavit describing the origins and conception of the claimed invention. We summarize the affidavit here in relevant part.

VerHoef’s dog Reilly developed difficulty walking after undergoing surgery. VerHoef Aff. ¶ 3; J.A. 122. Reilly would drag his hind paw and put weight on his paw’s knuckles, called “knuckling.” *Id.* Consequently, VerHoef met with a veterinarian, Dr. Alycia Lamb (“Lamb”), to begin rehabilitative therapy for Reilly. *Id.* ¶¶ 4–5.

Initial results using an underwater treadmill were disappointing and appeared to exacerbate the knuckling problem. *Id.* ¶ 5. Lamb then suggested trying a commercially available harness that would provide support to the

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<sup>1</sup> Because the ’201 application was filed before March 16, 2013, the pre-Leahy-Smith American Invents Act version of § 102 applies. See Pub. L. No. 112-29, 125 Stat. 284 (2011); 35 U.S.C. § 102 (2006).

hind leg. *Id.* The harness similarly did not fix the knuckling problem. *Id.* ¶ 6; J.A. 122. Consequently, VerHoef constructed a homemade harness modeled on the commercial one, but this yielded similar results. *Id.* ¶¶ 7–8; J.A. 123. VerHoef then recognized that the harness would work better if connected to the dog’s toes. *Id.* ¶ 8.

After mentioning this idea to Lamb during a therapy session, the following discussion occurred:

I said to Dr. Lamb, “There has to be a way to connect the cord to the toes.” At the end of our appointment, *Dr. Lamb suggested that a strap configured in a figure ‘8’ that fit around the toes and wrapped around the lower part of the leg, above the paw, might be something to consider.* In response, I said that I would try to figure out a way to make that work.”

*Id.* (emphasis added). VerHoef then implemented Lamb’s figure eight idea, and, after further adjustments, had a working device that reduced the knuckling problem. *Id.* ¶¶ 9–10, 17–18; J.A. 123–25.

VerHoef contacted a patent attorney who then filed a patent application directed to the homemade dog harness listing both VerHoef and Lamb as joint inventors. *Id.* ¶ 28; J.A. 126. The application included a single independent claim that expressly recited a figure eight loop that engages the dog’s toes, reading as follows:

1. A dog mobility device for assisting with a forward movement of a hind leg of a dog and with an upward movement of the dog’s toes, the dog mobility device comprising:

at least one elastic cord connectable to a dog harness, wherein the at least one elastic cord includes an upper forward end portion and a lower rearward end portion; and

a paw loop connectable to the lower rearward end portion of the elastic cord, *wherein the paw loop is configured to engage one of the dog's paws, and wherein the paw loop is defined by a material strip looped into a figure eight configuration, and wherein the material strip figure eight configuration further defines a metatarsal strap section and a toe strap section*, and wherein the metatarsal strap section is configured to receive and fit about the dog's metatarsus, and wherein the toe strap section is configured to receive and fit about the dog's two innermost toes.

J.A. 53 (emphasis added).

Relations between VerHoef and Lamb soured thereafter. In December 2011, VerHoef's patent attorney abandoned VerHoef's and Lamb's joint application and filed a substantially identical application, the '201 application, listing VerHoef as the sole inventor. VerHoef Aff. ¶¶ 40–43; J.A. 128. That same day Lamb also filed a substantially identical application listing herself as sole inventor. *Id.* ¶ 44. Each application recites the same independent claim reproduced above. J.A. 32; J.A. 101; J.A. 53.

The examiner issued a final rejection under § 102(f) after VerHoef had submitted the affidavit. The rejection stated that VerHoef “did not invent the claimed subject matter.” J.A. 151. VerHoef then appealed to the Board. The Board held that the paw loop configured in a figure eight was an essential element of the claimed invention, *Decision*, 2017 WL 745052, at \*4, and conception was thus not complete until Lamb suggested the figure eight loop, *id.* at 6. In addition, the Board determined that VerHoef did not maintain “intellectual domination” over the inventive process. *Id.* Accordingly, the Board concluded that Lamb was a joint inventor of the claimed invention

and sustained the examiner's rejection of the '201 application naming only VerHoef as inventor under § 102(f). *Id.*

VerHoef appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

Under 35 U.S.C. § 102(f) (2006), one cannot obtain a valid patent if “he did not himself invent the subject matter sought to be patented.” This provision requires that a patent accurately name the correct inventors of a claimed invention.<sup>2</sup> *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1349 (Fed. Cir. 1998); see *City of Milwaukee v. Activated Sludge*, 69 F.2d 577, 587 (7th Cir. 1934) (“When a number of persons make an invention jointly, a valid patent can not be taken out in the name of one of them.”). “[F]ailure to name them renders a patent invalid.” *Pannu*, 155 F.3d at 1350.

One court has said that the “exact parameters of what constitutes joint inventorship are quite difficult to define. It is one of the muddiest concepts in the muddy metaphysics of patent law.” *Mueller Brass Co. v. Reading Indus., Inc.*, 352 F. Supp. 1357, 1372 (E.D. Pa. 1972). But this court has stated that “[d]etermining ‘inventorship’ is nothing more than determining who conceived the subject matter at issue, whether that subject matter is recited in a claim in an application or in a count in an interference.” *Sewall v. Walters*, 21 F.3d 411, 415 (Fed. Cir. 1994). Whether such a determination is “nothing more than” or “quite difficult,” a valid patent requires correct inventorship.

Conception and inventorship are ultimately questions of law that we review *de novo*, but they are premised on

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<sup>2</sup> Although we note that 35 U.S.C. § 256 does provide for correction of inventorship of a patent.

underlying factual findings, *id.*, that we review for substantial evidence, *see In re Gartside*, 203 F.3d 1305, 1315 (Fed. Cir. 2000). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

VerHoef concedes that the figure eight loop was “an essential feature of the claimed invention that was conceived and suggested to him by another, [Lamb],” Appellant Br. 2, but argues that he should nonetheless be declared the sole inventor on the ’201 application because he maintained “intellectual domination and control of the work,” *id.* at 17. VerHoef relies on a previous Board decision, *Morse v. Porter*, 155 U.S.P.Q. 280, 1965 WL 6982 (B.P.A.I. 1965), for the proposition that a person may be named as a sole inventor even if that person did not conceive of each feature of the claimed invention, as long as the person maintained “intellectual domination” and control over the inventive process.

The PTO responds that because Lamb contributed the idea of the figure eight loop claimed in the ’201 application, Lamb is a joint inventor. As VerHoef failed to name Lamb as a joint inventor, the PTO argues that the claims of the ’201 application are unpatentable under § 102(f).

We agree with the PTO that Lamb is a joint inventor. “Conception is the touchstone of invention,” *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1227–28 (Fed. Cir. 1994) (citing *Sewall*, 21 F.3d at 415), and it requires a “definite and permanent idea of an operative invention, including *every feature* of the subject matter sought to be patented,” *Sewall*, 21 F.3d at 415 (emphasis added). “An idea is definite and permanent when the inventor has a specific, settled idea, a *particular solution* to the problem at hand, not just a general goal or research plan.” *Burroughs Wellcome*, 40 F.3d at 1228 (emphasis added).

When an invention is made jointly, the joint inventors need not contribute equally to its conception. See 35 U.S.C. § 116 (2006); *Pannu*, 155 F.3d at 1351. A joint inventor must:

- (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

*Pannu*, 155 F.3d at 1351. As we explain below, under this framework Lamb is a joint inventor because she contributed the idea of the figure eight loop, and the figure eight loop is an essential feature of the claimed invention.

VerHoef does not dispute that Lamb, not he, contributed the idea of the figure eight loop. Appellant Br. 2. According to his affidavit, VerHoef had only recognized the problem of connecting the cord of the harness to the dog's toes and discussed that problem with Lamb. VerHoef Aff. ¶ 8; J.A. 123. Then Lamb proposed "a particular solution to the problem," *Burroughs Wellcome*, 40 F.3d at 1228, the figure eight loop.

Furthermore, there is no dispute that the figure eight loop is an essential feature of the claimed invention expressly recited in the claims of the '201 application. Claim 1 recites only two limitations, one of which is a paw loop in a figure eight configuration. '201 application, claim 1. And during prosecution, VerHoef argued that the configuration of the paw loop, which necessarily includes the figure eight loop, distinguished the claimed invention over the prior art. J.A. 164. Thus, measured against the dimension of the claims, Lamb's contribution of the figure eight loop was not insignificant in quality, an explanation

of a well-known concept, or a summary of the prior art. See *Pannu*, 155 F.3d at 1351.

In sum, substantial evidence in the form of VerHoef's affidavit supports the Board's determinations that Lamb contributed the idea of the figure eight loop and that the figure eight loop is an essential feature of the invention not insignificant in quality or well-known in the art. Because these facts establish that Lamb shared in the conception of the claimed invention, we conclude that she is a joint inventor with VerHoef.<sup>3</sup>

VerHoef cites an earlier decision by the Board, *Porter*, 1965 WL 6982, at \*4, purportedly directing a different outcome. While *Porter* is not binding on this court, it does not support a different result. The Board in *Porter* decided a priority contest between putative inventors Morse and the group of Porter, Auville, and Winch ("Winch"). *Id.* at \*1. The invention at issue was a sanitary napkin with a particular stitching pattern. *Id.* Based on an extensive and conflicting record, ultimately the Board concluded that "[w]e cannot tell from the evidence which of the two, Morse and Winch, first suggested" the stitching pattern. *Id.* at \*4. Morse alone tested the various napkin iterations, while Winch "knew generally what Morse was working on" and assisted Morse in supplying different stitching patterns. *Id.* at \*2–3.

The Board stated that as long as an inventor "maintains intellectual domination of the work of making the invention . . . he does not lose his quality as inventor by reason of having received a suggestion or material from another even if such suggestion proves to be the key that unlocks his problem." *Id.* at \*4. According to the Board,

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<sup>3</sup> We note that VerHoef's attorney apparently thought similarly when he filed a joint application naming Lamb as a co-inventor on the device.

“at most [Winch] could only be a joint inventor with Morse.” *Id.* at \*5. However, in the context of their priority contest where the origin of the final stitching pattern was heavily disputed, the Board held that “we can not see Porter, Auville and Winch as the inventors of the napkin in issue to the exclusion of Morse.” *Id.*

Under the reasoning of *Porter*, VerHoef is not the sole inventor to the exclusion of Lamb. First, in the present case there is no factual dispute or conflicting testimony. Unlike the parties’ testimony concerning the stitching pattern at issue in *Porter*, VerHoef’s affidavit conclusively establishes that Lamb, not VerHoef, contributed the idea of the claimed figure eight loop.

Second, while we do not necessarily endorse the “intellectual domination” language of *Porter*, as it is vague and subject to variable meanings, the point here is that the key idea of the figure eight loop was Lamb’s, not VerHoef’s. Lamb “freely volunteered” the idea of the figure eight loop during a therapy session for Reilly. Appellant Br. 21; VerHoef Aff. ¶ 8; J.A. 123. VerHoef’s theory is that Lamb’s “naked idea was emancipated when she freely gave it to VerHoef.” Appellant Br. 22. But VerHoef cites no case adopting his “emancipation” theory, nor could we locate any. And for good reason, as it would be paradoxical to regard VerHoef as having solely conceived the invention when he admits to appropriating Lamb’s freely-given idea constituting an essential feature of the claimed invention.<sup>4</sup> Consequently, the Board’s reasoning in *Porter* does not disturb our conclusion that

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<sup>4</sup> The fact that Lamb joined the initial patent application as a joint inventor and then filed an application asserting her own claim to the invention indicates that she did not purport to surrender whatever rights she had in the invention to VerHoef.

Lamb is a joint inventor of the invention claimed in the '201 application.

We next address whether the Board properly affirmed the examiner's rejection of the claims under 35 U.S.C. § 102(f) given its joint inventorship determination. Under § 102(f), a person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented." This provision "makes the naming of the correct inventor or inventors a condition of patentability; failure to name them renders a patent invalid." *Pannu*, 155 F.3d at 1349–50. Accordingly, "[e]xaminers are required to reject applications under 35 U.S.C. § 102(f) on the basis of improper inventorship" when the facts so indicate. *Per-Septive Biosystems, Inc. v. Pharmacia Biotech, Inc.*, 225 F.3d 1315, 1321 (Fed. Cir. 2000); see *Leviton Mfg. Co. v. Universal Sec. Instruments, Inc.*, 606 F.3d 1353, 1360 (Fed. Cir. 2010) ("Even if one application had an earlier priority date, the examiner would have to evaluate which set of inventors actually conceived of the invention."). Consistent with statutory command and our precedent, the Manual of Patent Examining Procedure ("MPEP") instructs examiners that "[i]n the rare situation it is clear the application does not name the correct inventorship and the applicant has not filed a request to correct inventorship . . . , the examiner should reject the claims under . . . pre-AIA 35 U.S.C. [§] 102(f) for applications subject to pre-AIA 35 U.S.C. [§] 102." MPEP § 706.03(a) (9th ed. Jan. 2018).

This case presents the "rare situation," or at least an uncommon one, where the '201 application and VerHoef's affidavit make clear that he did not himself solely invent the subject matter sought to be patented, as those materials establish that Lamb was a joint inventor improperly omitted from the application. We therefore conclude that the Board properly sustained the examiner's rejection of the claims under § 102(f).

CONCLUSION

For the foregoing reasons, the decision of the Board is affirmed.

**AFFIRMED**