

APPENDIX—Continued

EXHIBIT 6

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

DATE: August 29, 1981
IN REPLY
REFER TO:
SUBJECT:

Airport Traffic Control Tower
Andrews Air Force Base
Camp Springs, MD 20724



TO: Linda Rose

Your letter dated August 11, 1981 requesting additional time in which to respond to your notice of intended removal issued August 7, 1981 was received in this office on August 20, 1981.

Since substantially more than the allowed seven days had expired without any response from you, I issued the decision letter on August 18, 1981. The decision letter was forwarded to you by first class and certified mail August 18, 1981.

However, we have carefully considered your request and find no reason to alter our decision.

The material relied upon to support the decision is available for review at Andrews AFB Control Tower, Camp Springs, Maryland. If you wish to review this material, please contact me.

Charlesan Neugebauer
CHARLESAN NEUGEBAUER
Chief, Andrews Tower



CUSTOM ACCESSORIES, INC.,
Plaintiff-Appellant,

v.

JEFFREY-ALLAN INDUSTRIES, INC.,
Defendant-Appellee.

Appeal No. 85-2728.

United States Court of Appeals,
Federal Circuit.

Dec. 12, 1986.

Patent holder brought infringement action. The United States District Court for the Northern District of Illinois, James B. Moran, J., determined that claims of patent for mud flap and splash guard assemblies were obvious and invalid. Holder appealed. The Court of Appeals, Edward S. Smith, Circuit Judge, held that: (1) old or unpatentable nature of each element in

claimed invention for mud flap or splash guard assemblies did not determine that invention was obvious and that patent was invalid; (2) District Court was required to consider objective evidence of nonobviousness, which included evidence of copying and commercial success; and (3) District Court failed to make sufficient, required findings with regard to scope and content of prior art, differences between prior art and claims at issue, level of ordinary skill in art, and objective evidence of nonobviousness.

Vacated and remanded.

1. Patents \Leftrightarrow 26(1 $\frac{1}{4}$)

Old or unpatentable nature of each element in claimed invention for mud flap or splash guard assemblies did not determine that invention was obvious as a whole

and that patent was invalid. 35 U.S.C.A. § 103.

2. Patents ⇐16.9

Finding that invention is improvement is not prerequisite to patentability. 35 U.S.C.A. §§ 100-103.

3. Patents ⇐36.1(2), 36.2(1)

Trial court deciding obviousness of patent for mud flap and splash guard assemblies was required to consider objective evidence of nonobviousness, which included evidence of copying and commercial success; rejecting *Dual Mfg. & Eng'g, Inc. v. Burris Indus., Inc.*, 619 F.2d 660 (7th Cir.); *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963 (7th Cir.). 35 U.S.C.A. § 103.

4. Patents ⇐36.1(1)

Absence of objective evidence of nonobviousness does not preclude holding of nonobviousness, in that objective evidence of nonobviousness is not prerequisite to patentability. 35 U.S.C.A. § 103.

5. Patents ⇐36(2)

Alleged infringer of patent for splash guard and mud flap assemblies had burden to prove obviousness and invalidity of each claim by clear and convincing evidence. 35 U.S.C.A. §§ 103, 282.

6. Patents ⇐112.4

Trial court deciding obviousness of invention for splash guard and mud flap assemblies was required to consider result of reexamination proceeding in Patent and Trademark Office, which upheld validity of patent claims despite presence of similar art that was also presented before district court. 35 U.S.C.A. §§ 103, 282.

7. Patents ⇐314(6)

District court determining obviousness of invention for splash guard and mud flap assemblies failed to make sufficient, required findings with regard to scope and content of prior art, differences between prior art and claims at issue, level of ordi-

nary skill in art, and objective evidence of nonobviousness. 35 U.S.C.A. § 103.

8. Patents ⇐16(3)

Actual inventor's skill is not determinative in deciding whether invention was obvious to person having ordinary skill. 35 U.S.C.A. § 103.

9. Patents ⇐16(1)

Factors to be considered in determining level of ordinary skill in art in order to determine whether patent is obvious include type of problems encountered in art, prior art solutions to problems, rapidity with which innovations are made, sophistication and technology, and educational level of active workers in field. 35 U.S.C.A. § 103.

10. Patents ⇐324.60

Inadequacy of findings by district court to enable determination whether invention for mud flap and splash guard assemblies was obvious justified remand. 35 U.S.C.A. § 103.

Richard D. Harris of Dick & Harris, Chicago, Ill., argued for plaintiff-appellant. With him on the brief were Richard Eugene Dick and Max Shaftal of Dick & Harris, Chicago, Ill.

John C. Brezina of Brezina & Buckingham P.C., Chicago, Ill., argued for defendant-appellee. With him on the brief was David C. Brezina, of Brezina & Buckingham P.C., Chicago, Ill.

Before DAVIS and SMITH, Circuit Judges, and RE, Chief Judge.*

EDWARD S. SMITH, Circuit Judge.

This is an appeal by Custom Accessories, Inc. (Custom), from a judgment of the United States District Court for the Northern District of Illinois, Eastern Division, holding invalid under 35 U.S.C. § 103 claims 1 and 6 of United States Patent No. 4,264,083 (the '083 patent). We vacate and remand.

designation.

* The Honorable Edward D. Re, Chief Judge, United States Court of International Trade, sitting by

Background

The facts recited in this opinion, unless otherwise indicated, are either uncontested by the parties or are findings of the district court not shown to have been clearly erroneous. FED.R.CIV.P. 52(a).

1. *The Technology*

Mud flap or splash guard assemblies are commonly used on motor vehicles to prevent damage to the frame due to pebbles, salt, mud, and other debris thrown from the vehicle path by rotating wheels. They are placed in close proximity to a wheel and occupy a rearward position relative to the primary direction of travel of the motor vehicle. The assembly usually includes a splash intercepting body portion, such as a flat resilient flap or a rigid metallic plate of light construction, anchored by a fastener to a fender area of the vehicle.

2. *The Patent*

The '083 patent was issued on April 28, 1981, to Matthew, *et al.*, and was assigned to Custom. A reissue patent application was filed on June 23, 1981, in the name of the original inventors. On February 19, 1982, Pretty Products, Inc., filed a request for reexamination in light of nine references not considered during prosecution. On June 3, 1982, the United States Patent and Trademark Office (PTO) merged the reissue application with the reexamination proceeding. Custom then expressly abandoned the reissue application on June 17, 1982. Original claims 1 and 6 were amended during, and ultimately survived, reexamination. A reexamination certificate including those claims was issued on March 22, 1983.

Claim 1 reads as follows:

1. A splash guard or mud flap assembly for attachment to the fender of a motor vehicle, comprising: a flexible, splash-intercepting body portion: resilient, self-sustaining anchoring means for supporting the body portion and being adapted to be snugly engaged along the fender of a motor vehicle for securing the body portion in a splash-intercepting

position thereon, said anchoring means including a front wall and a back wall resiliently integrally joined along one side in substantial overlying relation to one another and converging in the direction of the free ends thereof, the free ends of said walls being resiliently separable a distance to enable the anchoring means to be snugly frictionally engaged on a motor vehicle fender, the resiliency of the anchoring means being such that the front wall and the back wall thereof provide substantially the total gripping force for maintaining the anchoring means on a motor vehicle fender while providing a rigid support base for the splash-intercepting body portion of the splash guard, and an outwardly extending pin-like member carried on the front wall of the resilient anchoring means in spaced, inward relation to the free ends of said walls of the anchoring means for engaging and retaining said body portion on the anchoring means, said pin-like member being provided with locking means for securing and maintaining the splash-intercepting body portion on the anchoring means, said locking means being characterized in that it overlies and is in contact with a sufficient area of the splash-intercepting body portion to resist any forces tending to dislodge said body portion from the pin-like member.

Claim 6 recites:

A splash guard or mud flap assembly as claimed in claim 1 wherein the pin-like member of the anchoring means is provided with external threads for receiving a nut-like retaining member for securing and maintaining the splash-intercepting body portion on the anchoring means, said nut-like retaining member being characterized in that the base of the nut-like retaining member overlies and is in contact with a sufficient area of said body portion to resist any forces tending to dislodge the body from the pin-like member.

3. *District Court Proceeding*

Custom filed suit in the district court alleging infringement by appellee Jeffrey-

Allan Industries, Inc. (Jeffrey-Allan). Jeffrey-Allan denied infringement. It also raised as affirmative defenses and counterclaimed that claims 1 and 6 were invalid on the grounds of obviousness under 35 U.S.C. § 103, improper inventorship under 35 U.S.C. § 102(f), and overclaiming under 35 U.S.C. § 112.

The district court judge entered judgment for Jeffrey-Allan for the reasons contained in a July 26, 1985, "Memorandum and Order" that constituted the court's findings of fact and conclusions of law. The district court found claims 1 and 6 of the '083 patent invalid under 35 U.S.C. § 103,¹ but did not adjudicate any other issue. The Memorandum and Order does state, however, that "[d]efendant does not seriously contend that its splash guard assembly does not infringe."

Issue

Whether the district court erred in holding that claims 1 and 6 of the '083 patent are invalid under 35 U.S.C. § 103.

Opinion

Section 103 of 35 U.S.C. precludes a patent grant

if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. * *

Though the ultimate question is one of law, a determination of obviousness under section 103 is based on these factual inquiries set forth in *Graham v. John Deere Co.*:²

(a) the scope and content of the prior art;

1. The Memorandum and Order actually concluded that the use of Custom's "anchoring means rather than another in an old combination was * * * obvious." We presume the district court implicitly concluded that the inventions claimed by claims 1 and 6 would have been obvious.

2. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 86 S.Ct. 684, 693, 15 L.Ed.2d 545, 148 USPQ 459, 467 (1966).

(b) the differences between the prior art and the claims at issue; (c) the level of ordinary skill in the art; and (d) objective evidence of nonobviousness.³

Under *Graham*, a district court makes proper fact findings on those four inquiries and then assesses the ultimate legal question of nonobviousness. Thus, given the scope and content of the prior art, the differences between the claimed invention and the prior art, the level of ordinary skill in the art, and the existence of commercial success and any other objective considerations of nonobviousness, the district court determines whether the claimed invention would have been obvious to one of ordinary skill in the appropriate art at the time the invention was made.

At the conclusion of its 7½ page Memorandum and Order, the district court for the first time cites *Graham*, stating:

This court concludes, in accordance with the teachings of *Graham v. John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966); *Dual Mfg. & Engineering, Inc. v. Burriss Industries, Inc.*, 619 F.2d 660 (7th Cir.) (*en banc*), *cert. denied*, 449 U.S. 870, 101 S.Ct. 208, 66 L.Ed.2d 90 (1980) and *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963 (7th Cir. 1979), that the use of that anchoring means rather than another in an old combination was, in the circumstances of this case, obvious within the meaning of section 103.

That fleeting reference to *Graham* does not convince us that the district court in fact properly analyzed obviousness using the *Graham* analysis. Indeed, Custom has persuaded us to the contrary. That *Graham* was not properly applied is evidenced

3. See *Bausch & Lomb, Inc. v. Barnes-Hind Hydrocurve, Inc.*, 796 F.2d 443, 447, 230 USPQ 416, 421 (Fed.Cir.1986); *Loctite Corp. v. Ultraseal, Ltd.*, 781 F.2d 861, 872, 228 USPQ 90, 97-98 (Fed.Cir.1986); *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163, 225 USPQ 34, 37 (Fed.Cir.1985).

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by the district court: (1) improperly focusing on "a combination of old elements"; (2) ignoring objective evidence of nonobviousness; (3) paying lip service to the presumption of validity; and (4) failing to make sufficient *Graham* findings.

A. *Improperly Focusing on a Combination of Old Elements.*

[1] In assessing the patentability of Custom's device, the district court's Memorandum and Order refers to "a combination of old elements," which "is not necessarily an invention" but is entitled to patent protection if the combination "causes a new and useful result." Though it perceives one of the elements (the protruding pin in the anchoring means) as possibly novel, it states:

A U-clip with a locked pin surely was not itself patentable as an independent invention. Indeed, the plaintiff cancelled claims limited to the anchoring means during reexamination, when they were rejected as obvious. * * *

Such an approach is improper.

The dispositive question is not whether the claimed device is an "invention"; rather, it is whether the invention satisfies the standards of patentability. 35 U.S.C. §§ 100-103. To suggest that Custom's new combination "is not necessarily an invention" or otherwise to require some concept of "inventiveness" or "flash of genius" for patentability would improperly misplace the focus of 35 U.S.C. § 103.⁴

That each element in a claimed invention is old or unpatentable does not determine the nonobviousness of the claimed invention as a whole. "There is no basis in the

law * * * for treating combinations of old elements differently in determining patentability."⁵ As stated in *Stratoflex*:⁶

The reference to a "combination patent" is equally without support in the statute. There is no warrant for judicial classification of patents, whether into "combination" patents and some other unnamed and undefined class or otherwise. Nor is there warrant for differing treatment or consideration of patents based on a judicially devised label. Reference to "combination" patents is, moreover, meaningless. Virtually *all* patents are "combination patents," if by that label one intends to describe patents having claims to inventions formed of a combination of elements. It is difficult to visualize, at least in the mechanical-structural arts, a "non-combination" invention, i.e., an invention consisting of a *single* element. * * * [Emphasis in original.]

Casting an invention as "a combination of old elements" leads improperly to an analysis of the claimed invention by the parts, not by the whole. That is what seems to have happened here. The critical inquiry is whether "there is something in the prior art as a whole to *suggest* the desirability, and thus the obviousness, of making the combination."⁷

A traditional problem with focusing on a patent as a "combination of old elements" is the attendant notion that patentability is undeserving without some "synergistic" or "different" effect. Here, the district court spoke of the need for "a new and useful result." Such tests for patentability have been soundly rejected by this court.⁸

4. Cf. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540, 218 USPQ 871, 880 (Fed.Cir.1983) (a trial judge's "reference to 'the heart of invention' was * * * a * * * fall-back to the fruitless search for an inherently amorphous concept that was rendered unnecessary by the statute, 35 U.S.C. The *Graham* analysis here applied properly looked to *patentability*, not to 'invention.'" (Emphasis in original.)).

5. *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed.Cir.1985).

6. *Stratoflex*, 713 F.2d at 1540, 218 USPQ at 880.

7. *Fromson*, 755 F.2d at 1556, 225 USPQ at 31 (emphasis in original), quoting *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed.Cir.1984); see also *In re Deminski*, 796 F.2d 436, 442, 230 USPQ 313, 315-16 (Fed. Cir. 1986).

8. See, e.g., *Gardner v. TEC Sys., Inc.*, 725 F.2d 1338, 1349-50, 220 USPQ 777, 786 (Fed.Cir.) (in banc), cert. denied, 469 U.S. 830, 105 S.Ct. 116, 83 L.Ed.2d 60 (1984); *Stratoflex*, 713 F.2d at 1540, 218 USPQ at 880.

Though synergism is relevant when present, its "absence has no place in evaluating the evidence on obviousness."⁹

The district court's citation to *Dual Manufacturing*¹⁰ together with *Graham v. John Deere*, supports our conclusion that the district court was misled by improper "combination" notions. *Dual Manufacturing* expressly adopts the type of rationale regarding "combination patents" and synergism that this court has expressly rejected and only serves to confuse the real test of obviousness prescribed by the 1952 Patent Act. Though *Republic Industries, Inc. v. Schlage Lock Co.*,¹¹ also cited by the district court, is more in tune with Federal Circuit precedent on combination patents and synergism, the possibility exists that the district court gave more credence to *Dual Manufacturing* because it was decided in banc and subsequent to *Republic Industries*.

B. Ignoring Objective Evidence of Nonobviousness.

[2] The district court found that Custom's "assembly was an improvement, as persuasively evidenced by its adoption by competitors."¹² Though "not a major breakthrough," stated the court, "it was a better mousetrap than those on the market," and "[o]thers have adopted that design, so that it has become a commonly

sold configuration, thus providing support for a contention of commercial success, although plaintiff has had virtually no success in persuading its competition to take licenses." After saying that, however, the district court seemed to ignore the concrete evidence of copying and commercial success. Failure to consider such evidence is clearly error.

[3, 4] Under *Graham*, objective evidence of nonobviousness includes commercial success, longfelt but unresolved need, failure of others, and copying.¹³ When present, such objective evidence must be considered.¹⁴ It can be the most probative evidence of nonobviousness in the record, and enables the district court to avert the trap of hindsight.¹⁵ On the other hand, the absence of objective evidence does not preclude a holding of nonobviousness because such evidence is not a requirement for patentability.¹⁶ As stated in *Medtronic, Inc. v. Intermedics, Inc.*,¹⁷ the absence of objective evidence "is a neutral factor."

The district court's failure to consider objective evidence was probably fueled by the two cases it cited together with *Graham*. Both *Dual Manufacturing* and *Republic Industries* mistreat the importance of objective evidence, such as commercial success. They incorrectly state that such

9. *Stratoflex*, 713 F.2d at 1540, 218 USPQ at 880.

10. *Dual Mfg. & Eng'g, Inc. v. Burrus Indus., Inc.*, 619 F.2d 660, 205 USPQ 1157 (7th Cir.) (in banc), cert. denied, 449 U.S. 870, 101 S.Ct. 208, 66 L.Ed.2d 490 (1980).

11. *Republic Indus., Inc. v. Schlage Lock Co.*, 592 F.2d 963, 200 USPQ 769 (7th Cir.1979).

12. Finding that an invention is an "improvement" is not a prerequisite to patentability. It is possible for an invention to be less effective than existing devices but nevertheless meet the statutory criteria for patentability.

13. *Pentec, Inc. v. Graphic Controls Corp.*, 776 F.2d 309, 316-17, 227 USPQ 766, 770-71 (Fed. Cir.1985); see also *Windsurfing Int'l, Inc. v. AMF Incorporated*, 782 F.2d 995, 1000, 228 USPQ 562, 565 (Fed.Cir.), cert. denied, — U.S. —, 106 S.Ct. 3275, 91 L.Ed.2d 565 (1986).

14. *Loctite*, 781 F.2d at 873, 228 USPQ at 98; *Bausch & Lomb*, 796 F.2d at 450, 230 USPQ at 420; see also *Simmons Fastener Corp. v. Illinois Tool Works*, 739 F.2d 1573, 1575, 222 USPQ 744, 746 (Fed.Cir.1984), cert. denied, 471 U.S. 1065, 105 S.Ct. 2138, 85 L.Ed.2d 496 (1985).

15. *Pentec*, 776 F.2d at 315, 227 USPQ at 770; *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1555, 220 USPQ 303, 314 (Fed.Cir. 1983); *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 895; 221 USPQ 669, 675 (Fed.Cir.1984).

16. See, e.g., *Leinoff v. Louis Milona & Sons, Inc.*, 726 F.2d 734, 740, 220 USPQ 845, 849 (Fed.Cir. 1984).

17. *Medtronic, Inc. v. Intermedics, Inc.*, 799 F.2d 734, 739, 230 USPQ 641, 643 (Fed.Cir.1986).

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objective criteria "without invention will not make patentability."¹⁸

C. *Paying Lip Service to the Presumption of Validity.*

[5] A patent is presumed valid. 35 U.S.C. § 282. Indeed, each claim of a patent is presumed valid independently of the validity of other claims. *Id.* The burden is on the party asserting invalidity to prove the invalidity of each claim (here, claims 1 and 6) with facts supported by clear and convincing evidence.¹⁹

Though the district court stated that the presumption operates to "shift the burden of proof," the Memorandum and Order does not indicate a recognition by the district court that the burden is by clear and convincing evidence. Moreover, the Memorandum and Order occasionally suggests that the district court may have incorrectly placed the burden on the patentee to establish validity. For example, it states: "This court finds unpersuasive plaintiff's contention that Bedford does not anticipate * * *"²⁰

[6] Nor did the district court give any credence to the PTO reexamination proceeding, which upheld the validity of claims 1 and 6 despite the presence of much the same art as was presented before the district court. In *Interconnect Planning Corp. v. Feil*,²¹ this court stated that an examiner's decision on an original or reissue application is "evidence the court must consider in determining whether the party

18. *Dual Mfg.*, 619 F.2d at 666, 205 USPQ at 1164; *Republic Indus.*, 592 F.2d at 975, 200 USPQ at 777. In *Stratoflex*, 713 F.2d at 1539, 218 USPQ at 879, this court expressly rejected that notion as circular reasoning.

19. *Loctite*, 781 F.2d at 872, 228 USPQ at 97; *SSIH Equip., S.A. v. USITC*, 718 F.2d 365, 375, 218 USPQ 678, 687 (Fed.Cir.1983).

20. Anticipation is a consideration under 35 U.S.C. § 102, which states in subsection (a) that a person is not entitled to a patent if the invention was "patented or described in a printed publication." A reference "anticipates" when it includes each element of the claimed invention. Section 102 of 35 U.S.C. was not applied by the district court as a ground for invalidating claims 1 and 6.

asserting invalidity has met its statutory burden by clear and convincing evidence," and that, upon reissue, the burden of proving invalidity was "made heavier."²²

D. *Failing To Make Sufficient Graham Findings.*

[7] The amount and specificity of findings needed are determinations to be made on a case-by-case basis.²³ "[W]e must be convinced from the opinion that the district court actually applied *Graham* and must be presented with enough express and necessarily implied findings to know the basis of the trial court's opinion."²⁴ Certainly, when significant legal errors are reflected in the opinion, as here, which themselves shed doubt on the district court's use of *Graham*, the need for findings becomes greater and their absence rises to the level of error.²⁵

In this case, the failure of the district court to make sufficient *Graham* findings further supports our conclusion that *Graham* was not in fact properly applied. The findings were insufficient in at least three regards:

(1) *Scope and Content of Prior Art/Differences Between Prior Art and Claimed Invention*

The Memorandum and Order briefly discusses as prior art United States patents to Bedford, Jr., and to Wootton, a line of

21. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1139, 227 USPQ 543, 548 (Fed.Cir.1985) (quoting *Fromson*, 755 F.2d at 1555, 225 USPQ at 31).

22. *Accord American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1364, 220 USPQ 763, 774 (Fed.Cir.), cert. denied, 469 U.S. 821, 105 S.Ct. 95, 83 L.Ed.2d 41 (1984) (upon reissue in light of prior art before the district court, the "burden of proof of unpatentability has become more difficult to sustain").

23. *Loctite*, 781 F.2d at 873, 228 USPQ at 98.

24. *Id.*

25. *Id.*; *Jones v. Hardy*, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed.Cir.1984).

"Au-ve-co" devices, a Tinnerman parts catalogue, and a Rubber Queen assembly. However, the Memorandum and Order does not make clear which reference/devices (references) or combination of references provides the basis for determining obviousness. It is also not clear what teachings are relied on from each reference, and how each reference differs from the claimed invention.

Some differences were found, but improperly considered by the district court. For one, the district court did not find a teaching in any reference of a pin protruding or extending from a clip, but dismissed that difference by stating:

That the Au-ve-co unit and the Wootton patent disclosed an anchoring means in which a bolt threaded into the clip rather than a pin projecting from the clip does not dilute the force of the disclosure. Indeed, the idea taken to DeChant could have ended up in commercial production in that form. * * *

It is unclear what is meant by "does not dilute the force of the disclosure." Clearly, the district court identified a difference between the claimed invention and the prior art—the protruding pin. Before deeming the claimed invention obvious, the district court would have to find some suggestion in the references for using an "outwardly extending pin-like member," as required by the claims.

The district court also stated:

What was brought to him [DeChant, who designed the fastener] was the idea, reduced to practice in a primitive form, of an anchoring means in a splash guard assembly which used a pin attached as part of a clip and projecting through the splash guard. There was no reason, in light of the conception, that the attachment to the clip could not have been by

screwing a bolt into threads [like in the prior art] * * *.

That approach appears inappropriately to perceive an element of the claimed invention (*i.e.*, a pin as part of the clip protruding through the splash guard) broadly as an "idea" or "conception" (screwing a bolt into threads) that the district court viewed as being old in the prior art. Such treatment emasculates a real difference in this case between the claimed invention and the prior art.

(2) *Level of Ordinary Skill*

The *Graham* analysis includes a factual determination of the level of ordinary skill in the art. Without that information, a district court cannot properly assess obviousness because the critical question is whether a claimed invention would have been obvious at the time it was made to one with ordinary skill in the art.²⁶ The important consideration is "the need to adhere to the statute, *i.e.*, to hold that an invention would or would not have been obvious, as a whole, when it was made, to a person of 'ordinary skill in the art'—not to the judge, or to a layman, or to those skilled in remote arts, or to geniuses in the art."²⁷

[8, 9] The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art.²⁸ The actual inventor's skill is not determinative.²⁹ Factors that may be considered in determining level of skill include: type of problems encountered in art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.³⁰ Not all such

26. *Stratoflex*, 713 F.2d at 1538, 218 USPQ at 878-79.

27. *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 697, 218 USPQ 865, 868-69 (Fed. Cir.1983), *cert. denied*, 464 U.S. 1043, 104 S.Ct. 709, 79 L.Ed.2d 173 (1984).

28. *See, e.g., Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 454, 227 USPQ 293, 297 (Fed.Cir.1985).

29. *Id.*

30. *Environmental Designs*, 713 F.2d at 696, 218 USPQ at 868.

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factors may be present in every case, and one or more of them may predominate.³¹

In appropriate cases we have noted a district court's failure to make a specific, or correct, finding on level of skill, without the consequence of reversal.³² In those instances, however, it was not shown that the failure to make a finding or an incorrect finding on level of skill influenced the ultimate conclusion under section 103 and, hence, constituted reversible error.

In the present case, we do not reverse or vacate solely because of a failure to make the level of skill finding. We merely consider the district court's failure to make that and other *Graham* findings as evidence that *Graham* was not in fact applied.³³

(3) Objective Evidence of Nonobviousness

It is difficult for us to tell from the district court's discussion of commercial success (*see* discussion at section B, *supra*) whether there was a finding of commercial success and, if so, whether there was "nexus" between the commercial success and the claimed invention. Such nexus, the existence of which Jeffrey-Allan on appeal disputes, is needed if commercial success is to be considered.³⁴

Conclusion

[10] If, on review of a determination of obviousness, an appellant shows that the district court incorrectly applied the law, we will not reverse (*i.e.*, hold that defendant below failed to prove obviousness) unless appellant also convinces us that a proper application of the law to the facts of

31. *Id.*

32. *See, e.g., Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1574, 230 USPQ 81, 86 (Fed.Cir.1986); *Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567, 1573, 220 USPQ 584, 589 (Fed.Cir.1984); *Chore-Time Equip., Inc. v. Cumberland*, 713 F.2d 774, 779, 218 USPQ 673, 676 (Fed.Cir.1983).

33. In *Chore-Time* and *Union Carbide*, this court noted that the prior art itself reflects an appropriate level of skill. *See also Litton Indus.*, 755 F.2d at 163-64, 225 USPQ at 38. In the present

record would change the result.³⁵ Sometimes, however, an appellant will convince us that the law was incorrectly applied, but there are inadequate findings by the district court to enable us to determine independently whether defendant below did or did not prove that the invention would have been obvious. That has happened here because, as explained above, there are inadequate findings in a number of regards. In such circumstances, rather than find material facts ourselves, we must remand to allow the district court to do so. As stated in *Icicle Seafoods, Inc. v. Worthington*:³⁶

If the Court of Appeals believed that the District Court had failed to make findings of fact essential to a proper resolution of the legal question, it should have remanded to the District Court to make those findings. If it was of the view that the findings of the District Court were "clearly erroneous" within the meaning of Rule 52(a), it could have set them aside on that basis. If it believed that the District Court's factual findings were unassailable, but that the proper rule of law was misapplied to those findings, it could have reversed the District Court's judgment. But it should not simply have made factual findings on its own.

Hence, we vacate the judgment of the district court and remand for further proceedings. The district court, based on the record before it and in light of the guidance provided herein, is instructed (1) to make proper findings underlying a determination under section 103, sufficient for us to review its judgment and to assure us that the *Graham* test was in fact applied, and (2) to

case, the district court made no similar notation.

34. *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1026, 226 USPQ 881, 887 (Fed.Cir. 1985).

35. *See, e.g., Carella v. Starlight Archery & Pro-line Co.*, 804 F.2d 135, 140 (1986); *Union Carbide*, 724 F.2d at 1523, 220 USPQ at 589.

36. *Icicle Seafoods, Inc. v. Worthington*, — U.S. —, 106 S.Ct. 1527, 1530, 89 L.Ed.2d 739 (1986).

determine whether defendant below has carried its burden of showing by clear and convincing evidence that the claimed invention would have been obvious under section 103. If the district court deems it appropriate, it may elicit new evidence.

On remand, the district court should also address the other issues presented, *e.g.*, "overclaiming," the section 102(f) defense, and infringement, and should enter judgment accordingly. That way, we need not remand the case should we reverse the district court, in a future appeal, on, *e.g.*, a determination of obviousness. Too often, district courts resolve only one of a number of issues presented and, when reversed on that issue, are forced to retry the remainder of the case. Such retrial is, on balance, an inefficient use of the judicial process. It can, for example, involve duplication of much of the testimony and evidence presented at the first trial.³⁷

VACATED AND REMANDED



BIO-RAD LABORATORIES, INC.,
etc., Appellant,

v.

NICOLET INSTRUMENT
CORPORATION, etc.,
Appellee.

Appeal No. 86-840.

United States Court of Appeals,
Federal Circuit.

Dec. 16, 1986.

Appeal was taken from decision of the United States District Court for the Northern District of California, Lloyd H. Burke, J., finding patent valid and infringed. The Court of Appeals, 739 F.2d 604, vacated

37. See, *e.g.*, *Stratoflex*, 713 F.2d at 1540-41, 218

and remanded in part and affirmed in part. On remand, the District Court limited prejudgment interest to nine months, and appeal was taken. The Court of Appeals, Friedman, Circuit Judge, held that: (1) district court's finding in support of its limitation of prejudgment interest that patent owner delayed beginning of trial by six months was clearly erroneous; (2) time it took patent owner to file patent infringement suit did not constitute "undue delay" for purposes of denying owner prejudgment interest; (3) limitation of prejudgment interest to nine months could not be justified as sanction for abuse of discovery process by patent owner; and (4) patent owner's alleged delay in bringing case to trial or alleged discovery improprieties did not warrant using seven percent rate of un-compounded interest as prejudgment interest rate.

Vacated and remanded.

Baldwin, Senior Circuit Judge, filed concurring opinion.

1. Patents \Leftrightarrow 319(4)

District court's finding in support of its limitation of prejudgment interest that patent owner delayed beginning of trial by six months was clearly erroneous, where trial date was set at first status conference, trial commenced only one day after specified date, and there was no indication that, but for behavior of patent owner, trial could or would have begun earlier.

2. Patents \Leftrightarrow 319(4)

Time it took patent owner to file patent infringement suit did not constitute "undue delay" for purposes of denying patent owner prejudgment interest.

See publication Words and Phrases for other judicial constructions and definitions.

3. Patents \Leftrightarrow 319(4)

Dilatory action during discovery, without resultant delay in trial, does not justify limiting period of prejudgment interest.

USPQ at 880.