

# **United States Court of Appeals for the Federal Circuit**

04-1149

IRON GRIP BARBELL COMPANY, INC.,

Plaintiff-Appellant,

and

YORK BARBELL COMPANY, INC.,

Plaintiff,

v.

USA SPORTS, INC.,

Defendant-Appellee.

Brian M. Daucher, Sheppard Mullin Richter & Hampton LLP, of Costa Mesa, California, argued for plaintiff-appellant. With him on the brief was Yael Karabelnik.

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Appealed from: United States District Court for the Central District of California

Judge Gary L. Taylor

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DECIDED: December 14, 2004

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Before NEWMAN, Circuit Judge, ARCHER, Senior Circuit Judge, and DYK, Circuit Judge.

DYK, Circuit Judge.

Iron Grip Barbell Company (“Iron Grip”) appeals from the judgment of the United States District Court for the Central District of California. The district court found claims 1 to 3 and 6 to 8 of Iron Grip’s patent, U.S. Patent No. 6,436,015 (“the ‘015 patent”), to be invalid as obvious. We affirm.

## BACKGROUND

Iron Grip is a manufacturer of weight plates used with fitness equipment such as barbells and is the assignee of the ’015 patent. Claim 1 of the ’015 patent claims:

A weight plate for physical fitness including: a plate body formed with a central throughbore and . . . further formed with solely a triad of spaced apart elongated handle openings disposed generally equiangularly . . . , said openings having respective outboard edges cooperating with said plate to define a triad of integral handle elements for grasping by a single hand to effect transport of said weight plate.

Id. col. 4, ll. 24-35 (emphasis added). The other claims in the '015 patent at issue here depend from claim 1 and are not different for present purposes.

Typically, a barbell consists of a rigid bar and removable weight plates attached on both ends. Traditional weight plates had a single hole in the center for attachment to the barbell. A key problem with traditional single-hole weight plates was that they were difficult to grasp and transport. Iron Grip's '015 patent addresses this defect of traditional weight plates by disclosing a weight plate with three elongated openings near the periphery of the plate that function effectively as handles.

During the prosecution of the '015 patent, Iron Grip disclosed prior art showing, inter alia, weight plates with one elongated grip, U.S. Patent No. 4,199,140 ("the '140 patent"), and two elongated grips, U.S. Patent No. 5,137,502 ("the '502 patent"). The examiner further considered other prior art including barbell weight plates with four openings. U.S. Patent No. 4,618,142. After multiple rejections on grounds of obviousness, the '015 patent eventually issued on Aug. 20, 2002.

USA Sports, Inc. ("USA Sports") is a competing manufacturer of weight plates. It also manufactures a three-grip plate. In May of 2002, Iron Grip sued USA Sports in the district court for infringement of an unrelated patent, and subsequently amended its complaint to state an action for infringement of claims 1-3 and 6-8 of the '015 patent. USA Sports defended on the basis that the asserted claims in the '015 patent were invalid as obvious in light of the prior art. Both sides moved for summary judgment.

The district court initially granted summary judgment in favor of Iron Grip, finding that USA Sport's weight plate infringed the '015 patent; and denied USA Sport's summary judgment motion as to the invalidity of the '015 patent, holding that a finding of invalidity for obviousness required a "suggestion, motivation, or teaching in the prior art to combine the elements [from separate references]." (J.A. at 1897.) Upon motion for reconsideration, however, the district court held that the contested claims in the '015 patent were obvious. The district court found that its prior understanding of the law was "unduly restrictive." (J.A. at 2921.) Instead, it held that "the cases . . . permit the court to look at the overall picture of what's really going on . . . . The obviousness test . . . calls upon the court to just simply exercise common sense . . . ." (Id.) Applying this new test, the district court held that "it would have been obvious to a layman to combine the prior art," and invalidated claims 1-3 and 6-8 of the '015 patent. (J.A. at 3.) Iron Grip appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).<sup>1</sup>

## DISCUSSION

### I

We review the district court's grant of summary judgment without deference. Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1379 (Fed. Cir. 2001). We therefore affirm the district court only if there is no genuine issue of material fact as to the invalidity of the claims. In making this determination, a patent is presumed to be valid. 35 U.S.C. § 282 (2000); Cardinal Chem. Co. v. Morton Int'l, 508 U.S. 83, 93 n.15 (1993). USA Sports bears the burden of proving invalidity by clear and convincing

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<sup>1</sup> On appeal, USA Sports has not contested the finding of infringement except on the ground of invalidity.

evidence. Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1560 (Fed. Cir. 1984).

In determining obviousness, we employ the four-part test set forth in Graham v. John Deere Co., 383 U.S. 1 (1966). This test requires us to examine (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) the objective evidence of nonobviousness. Id. at 17-18; see also 35 U.S.C. § 103 (2000).

We note that neither side disputes that weight plates showing one, two and four elongated openings were within the prior art. We also note that neither side disputes that the proper level of ordinary skill in the art is that of a layman. Therefore, the only points of contention in the obviousness inquiry are the differences between the claimed invention and the prior art, and the objective evidence of nonobviousness.

## II

We turn first to a comparison between the prior art and the claimed invention. In this inquiry, we are mindful of the repeated warnings of the Supreme Court and this court as to the danger of hindsight bias. See, e.g., Graham, 383 U.S. at 36 (consideration of secondary factors “serve[s] to guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue” (internal quotations and citations omitted)); In re Kotzab, 217 F.3d 1365, 1369 (Fed. Cir. 2000) (“[T]he very ease with which the invention can be understood may prompt one to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.” (internal quotations omitted)). We note in this respect that the district court’s use of an “overall

picture" and "common sense" test of obviousness falls squarely into the hindsight trap.

See In re Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002).

Where an invention is contended to be obvious based upon a combination of elements across different references, our cases require that there be a suggestion, motivation or teaching to those skilled in the art for such a combination. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). This requirement prevents the use of "the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight." Ecolochem, Inc. v. So. Cal. Edison Co., 227 F.3d 1361, 1371-72 (Fed. Cir. 2000) (quoting In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999)).

In this case, however, obviousness does not arise from any combination of elements from the prior art. Rather, the issue of the '015 patent's obviousness arises because the prior art showed one, two and four elongated handles on weight plates. A single elongated handle on a weight plate was disclosed by the '140 patent. Two elongated handles on a weight plate was disclosed by the '502 patent. Four elongated handles on a weight plate was disclosed by U.S. Design Patent No. 406,183 ("the '183 patent"). Reproductions of the two and four grip weight plates in the prior art, and Iron Grip's three-grip weight plate, appear below:

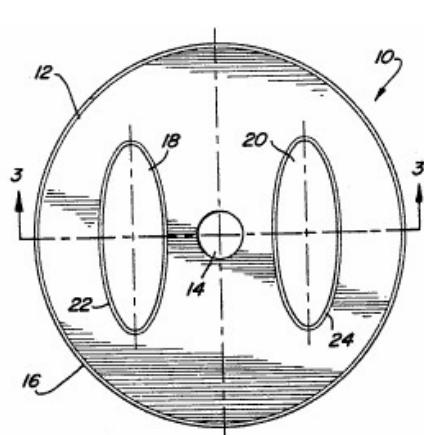


Fig. 1. The '502 patent's two-grip plate.

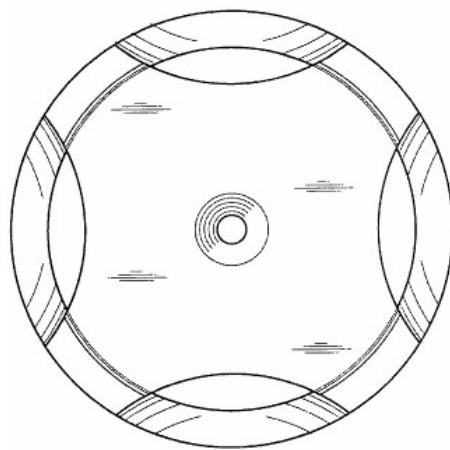


Fig. 2. The '183 patent's four-grip plate.

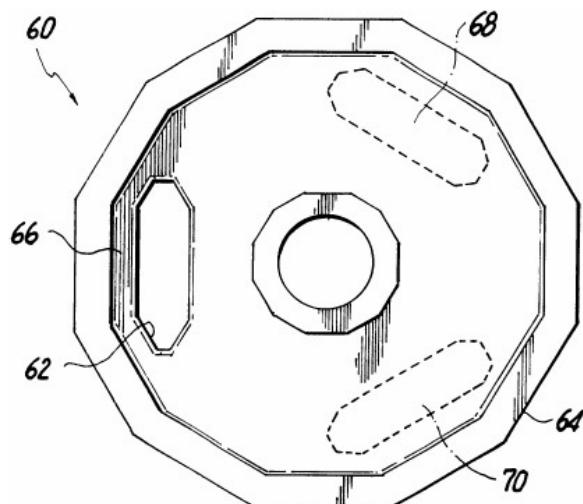
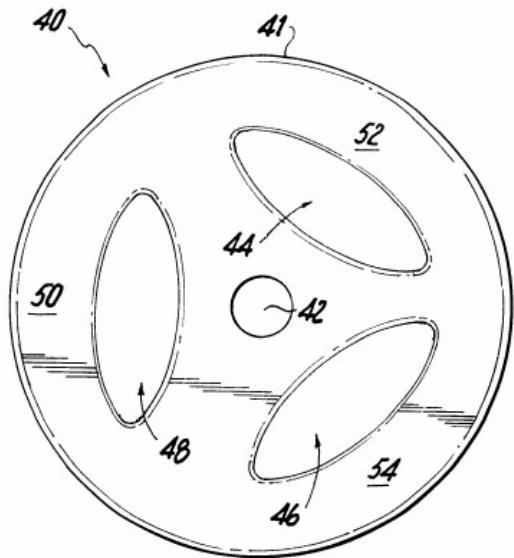


Fig. 3. The '015 patent's three-grip plates.

The key feature of the '015 patent, the fact that there are three elongated handles, falls within a range disclosed by the prior art. Where the “prior art . . . discloses a range encompassing a somewhat narrower claimed range,” the narrower range may be obvious. *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003). “[W]hen the difference between the claimed invention and the prior art is the range or value of a

particular variable,” then a patent should not issue if “the difference in range or value is minor.” Haynes Int’l v. Jessop Steel Co., 8 F.3d 1573, 1577 n.3 (Fed. Cir. 1993); see also Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 783 (Fed. Cir. 1985) (invention found obvious because it was close to prior art range). Thus simply because an invention falls within a range disclosed by the prior art does not necessarily make it *per se* obvious. Both the genus and species may be patentable.

Nonetheless, where there is a range disclosed in the prior art, and the claimed invention falls within that range, there is a presumption of obviousness. But the presumption will be rebutted if it can be shown: (1) That the prior art taught away from the claimed invention, In re Geisler, 116 F.3d 1465, 1471 (Fed. Cir. 1997); or (2) that there are new and unexpected results relative to the prior art, In re Woodruff, 919 F.2d 1575, 1578 (Fed. Cir. 1990).

There is, to be sure, one distinguishing feature of these range cases. Each involved a range disclosed within a single patent, while here the range is disclosed in multiple prior art patents. But, under the circumstances of this case, that is a distinction without a difference. The prior art suggested that a larger number of elongated grips in exercise weights was beneficial,<sup>2</sup> thus plainly suggesting that one skilled in the art look to the range appearing in the prior art. The prior art disclosed weight plates with one, two and four elongated handles. Iron Grip is claiming a weight plate with three elongated handles, within the range of the prior art.

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<sup>2</sup> For example, U.S. Patent 4,673,179 describes a gymnastics weight with multiple handles as “very utilitarian” because it “enables a large number of grasping portions, and is very easily manipulated by the user.” Id. col. 4, ll. 52-54.

It is also manifest that neither of the recognized exceptions applies here. First, Iron Grip offers no evidence that the prior art taught away from the invention besides the broad conclusory statement that “the prior art . . . taught towards fewer grips.” (Reply Br. of Appellant at 14.) The prior art does not support this conclusion. There is no evidence of “sufficient teaching away.” In re Malagari, 499 F.2d 1297, 1303 (C.C.P.A. 1974).

Second, there has been no showing that the three grips led to unexpected results.

Where “the difference between the claimed invention and the prior art is some range or other variable within the claims . . . , the [patentee] must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results.” Woodruff, 919 F.2d at 1578. In the case of In re Huang, 100 F.3d 135 (Fed. Cir. 1996), we sustained a finding of obviousness in a situation somewhat similar to that involved here. In Huang, the claimed invention was a shock-absorbing grip with a polyurethane layer and a textile layer. The difference between the Huang grip and the prior art was that the Huang grip increased the thickness of the polyurethane layer relative to the textile layer, and had greater shock-absorbing qualities. There was nothing new or unexpected about this result because the prior art taught “that shock absorption derives in part from the compressible nature of the polyurethane layer. Given that the polyurethane layer absorbs shock, one of ordinary skill would logically infer that increasing the amount of the shock absorbing material (the polyurethane) would lead to an increase in the amount of shock absorption.” Id. at 139. The invention was obvious because

Huang's contribution to the art could only lie in the specific thickness ratios recited in the claims. This court and its predecessors have long held . . . that even though [a] modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art, unless the claimed ranges "produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art."

Id. (quoting In re Aller, 220 F.2d 454, 456 (C.C.P.A. 1955)).

There is no indication of any new and unexpected results from the use of a three-grip plate in the '015 patent or the prosecution history. The only benefit Iron Grip discloses in the patent regarding a three-grip plate is that "[t]his construction allows a user to quickly find a handle element quickly [sic] and effortlessly." '015 patent, col. 4, ll. 3-4. There is no explanation why, as compared to the two or four grip plates in the prior art, a three-grip plate has advantages in this regard. A review of the prosecution history is likewise uninformative. In addition to the benefit of allowing a user to find a handle quickly and effortlessly, the examiner cites the ability of the user to grasp the handles of the plate with two hands at an appropriate angle as a reason for allowing the claim. (J.A. at 1237.) There is again no explanation of why such an effect could not likewise be achieved using a plate with two or four handles as existed in the prior art. We conclude that the patent and its prosecution history do not disclose any new and unexpected results from having three elongated grips on a weight plate. Nor has Iron Grip shown new and unexpected results based on evidence outside the patent and its prosecution history.

Finally, Iron Grip argues that Huang is inapposite because it was an appeal from the Board of Patent Appeals and Interferences ("Board"), and submits that it stands for the proposition of deference to the examiner and the Board. There is no merit to Iron

Grip's contention. It is well-settled that "[o]bviousness is a legal question based on underlying factual determinations," and in appeals from the Board "[w]e review the ultimate legal determination of obviousness without deference." In re Zurko, 258 F.3d 1379, 1383-84 (Fed. Cir. 2001); see In re McCarthy, 763 F.2d 411, 412 (Fed. Cir. 1985). Here there is no factual issue. On the legal issue of obviousness (as opposed to the underlying factual issues) the grant of a patent does not create a presumption of validity beyond the requirement that the party seeking to invalidate a patent must prove invalidity by clear and convincing evidence. SSIH Equip. S.A. v. USITC, 718 F.2d 365, 375 (Fed. Cir. 1983).

Because the claimed invention falls within a range disclosed in the prior art, and the patentee has not shown that the prior art taught away from the invention or new and unexpected results from a three elongated grip weight plate as compared to those in the prior art, we conclude that the claims are obvious absent substantial evidence of pertinent secondary factors supporting patentability.<sup>3</sup>

### III

We now consider whether the patentee has demonstrated secondary evidence of nonobviousness. We have previously held that in "determining the question of obviousness, inquiry should always be made into whatever objective evidence of nonobviousness there may be." Vandenberg v. Dairy Equip. Co., 740 F.2d 1560, 1567 (Fed. Cir. 1984); see also Alza Corp. v. Mylan Labs. Inc., No. 04-1344, slip op. at 12 n.9 (Fed. Cir. Dec. 10, 2004). The district court's opinion here did not consider the

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<sup>3</sup> There is no claim here that expert testimony is required, the technology being simple. See Centricut LLC v. Esab Group, Inc., Nos. 03-1574 & 03-1614, slip op.

patentee's claimed evidence. "Our precedents . . . establish that failure to cite secondary considerations, alone, is not reversible error." Ruiz v. A.B. Chance Co., 234 F.3d 654, 668 (Fed. Cir. 2000). "Where the evidence of record is unchallenged as to secondary considerations ignored by the decision maker, this court may, as a matter of law, consider this objective evidence in reviewing the ultimate conclusion of obviousness/nonobviousness entered by the trial court" without the need for a remand. Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 307 (Fed. Cir. 1985). Because in considering this record evidence, we conclude that it does not show the existence of relevant secondary factors to support patentability, we affirm the district court.

This court has previously identified, inter alia, commercial success, satisfaction of a long-felt need, and copying to be relevant factors in this inquiry. See Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392 (Fed. Cir. 1988) (commercial success); Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1054 (Fed. Cir. 1988) (long-felt need); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1574 (Fed. Cir. 1996) (copying).

Iron Grip has not made a showing of commercial success. Our cases make clear that a "nexus must be established between the merits of the claimed invention and evidence of commercial success before that evidence may become relevant to the issue of obviousness." Solder Removal Co. v. USITC, 582 F.2d 628, 637 (C.C.P.A. 1978). Ordinarily, this nexus may be inferred when "the patentee shows both that there is commercial success, and that the thing (product or method) that is commercially

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at 13-14 (Fed. Cir. Dec. 6, 2004). Indeed, both parties agree that the level of skill in the

successful is the invention disclosed and claimed in the patent.” Demaco, 851 F.2d at 1392.

The only evidence of marketplace success that Iron Grip proffers is that six retail competitors offered three-grip plates, and three of those competitors have entered into license agreements with respect to the ‘015 patent. (Br. of Appellant at 51.) Iron Grip does not explain the terms of the licenses nor the circumstances under which they were granted, except to concede that two were taken in settlement of litigation. (J.A. at 2121-22.) Our cases specifically require affirmative evidence of nexus where the evidence of commercial success presented is a license, because it is often “cheaper to take licenses than to defend infringement suits.” EWP Corp. v. Reliance Universal Inc., 755 F.2d 898, 908 (Fed. Cir. 1985). Thus we held in In re GPAC Inc., 57 F.3d 1573 (Fed. Cir. 1995), that licenses “may constitute evidence of nonobviousness; however, only little weight can be attributed to such evidence if the patentee does not demonstrate a nexus between the merits of the invention and the licenses of record.” Id. at 1580 (internal quotations and citations omitted). Without a showing of nexus, “the mere existence of . . . licenses is insufficient to overcome the conclusion of obviousness” when there is a strong prima facie case of obviousness. SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp., 225 F.3d 1349, 1358 (Fed. Cir. 2000). There is no such evidence of a nexus here; hence the existence of licenses is of little significance.<sup>4</sup>

Iron Grip places significant emphasis on the fact that, before it filed for the ‘015 patent, there was no three-grip plate being offered in the retail market. It argues that

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art is that of a layperson. (Br. of Appellant at 43; Br. of Appellee at 50.)

the absence of such a three-grip plate in light of the prior art speaks to the nonobviousness of its invention. However, Iron Grip has presented no evidence of a long-felt need for three-grip weight plates or the failure of others. Absent a showing of long-felt need or the failure of others, the mere passage of time without the claimed invention is not evidence of nonobviousness. See In re Wright, 569 F.2d 1124, 1127 (C.C.P.A. 1977).

Iron Grip also argues that USA Sports has copied its invention and this is objective evidence of nonobviousness. Our cases do establish that copying by a competitor may be a relevant consideration in the secondary factor analysis. Vandenberg, 740 F.2d at 1567. Not every competing product that arguably falls within the scope of a patent is evidence of copying. Otherwise every infringement suit would automatically confirm the nonobviousness of the patent. Rather, copying requires the replication of a specific product. This may be demonstrated either through internal documents, see Akamai Techs., Inc. v. Cable & Wireless Internet Servs., Inc., 344 F.3d 1186, 1196-97 (Fed. Cir. 2003); direct evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a virtually identical replica, see Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1285 (Fed. Cir. 2000); or access to, and substantial similarity to, the patented product (as opposed to the patent), Cable Elec. Prods., Inc. v. Genmark, Inc., 770 F.2d 1015, 1027 (Fed. Cir. 1985), overruled on other grounds by, Midwest Indus., Inc. v. Karavan Trailers, Inc., 175 F.3d 1356, 1359 (Fed. Cir. 1999) (en banc). The evidence

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<sup>4</sup> Whatever little significance the licenses may have is clearly outweighed by the strong evidence of obviousness found in the prior art. Ruiz, 234 F.3d at 668; Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1131 (Fed. Cir. 2000).

of copying offered by Iron Grip is that USA Sports abandoned a one-grip plate and produced a three-grip plate after the '015 patent issued, despite receiving assurance from Iron Grip that a one-grip plate would not infringe Iron Grip's patent. (Br. of Appellant at 52-53.) This does not establish that USA Sports engaged in copying.

Since Iron Grip has not presented evidence of commercial success, satisfaction of a long-felt need, or copying, we conclude that there is no objective evidence to rebut the strong showing of obviousness based on the prior art.<sup>5</sup>

#### CONCLUSION

For these reasons, the district court's grant of summary judgment as to the invalidity of claims 1-3 and 6-8 of the '015 patent is

AFFIRMED.

COSTS

No costs.

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<sup>5</sup> On appeal, Iron Grip does not argue that defendant claims 2-3 and 6-8 were improperly held to be obvious if the obviousness determination as to claim 1 is sustained. We interpret the district court's judgment as reaching only the asserted claims (i.e. claims 1-3 and 6-8). Given our disposition it is unnecessary for us to consider the other alleged prior art submitted by USA Sports.