

NOTE: This disposition is nonprecedential.

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

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**JOY MM DELAWARE, INC. AND  
JOY TECHNOLOGIES, INC. (DOING BUSINESS AS  
JOY MINING MACHINERY),**  
*Plaintiffs-Appellants,*

v.

**CINCINNATI MINE MACHINERY, CO.,**  
*Defendant-Appellee.*

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2012-1153

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Appeal from the United States District Court for the  
Western District of Pennsylvania in case no. 09-CV-1415,  
Chief Judge Gary L. Lancaster.

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Decided: November 8, 2012

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KATHERINE W. SCHILL, Michael Best & Friedrich,  
LLP, of Milwaukee, Wisconsin, argued for plaintiffs-  
appellants. With him on the brief was JONATHAN H.  
MARGOLIES.

BRETT A. SCHATZ, Wood, Herron & Evans, L.L.P., of Cincinnati, Ohio, argued for defendant-appellee. With him on the brief was GREGORY F. AHRENS.

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Before BRYSON, PROST, and REYNA, *Circuit Judges*.

PROST, *Circuit Judge*.

Joy MM Delaware, Inc. and Joy Technologies, Inc. (collectively “Joy”) appeal the district court’s grant of summary judgment to Cincinnati Mine Machinery, Co., (“CMM”) of noninfringement of claim 2 of U.S. Patent No. 6,662,932 (“’932 patent”) and of invalidity of that claim for failing to satisfy the best mode requirement of 35 U.S.C. § 112. As part of its appeal, Joy also challenges the district court’s construction of the term “indentations” in that claim. Because the district court properly construed the term “indentations,” we *affirm* the grant of summary judgment of noninfringement. However, because there is no evidence in the record upon which a reasonable jury could rely to find that the inventor of the ’932 patent concealed the best mode for practicing his invention, we *reverse* the grant of summary judgment to CMM with respect to best mode and *remand* for entry of summary judgment in favor of Joy on that issue.

#### BACKGROUND

Joy filed suit against CMM in October 2009 alleging that CMM’s mining machine, the DA-350 flight conveyor (“DA-350”), infringed claim 2 of the ’932 patent. Claim 2 is directed at an apparatus for use in mining and reads:

A chain and flight assembly adapted to travel over a pan, said conveyor chain and flight assembly including

- a first link assembly and a second link assembly, each of which includes
  - two spaced apart drive pins, each of which has a first end and a second end,
  - two spaced apart side plates, each of which has two spaced apart openings, each opening receiving a different one of said drive pins, and
  - drive pin retaining means for retaining said drive pins in said side plates,
- a swivel assembly connecting said two link assemblies, said swivel assembly including a swivel pin,
- a male connecting lug having a base having a horizontal bore that receives one of said drive pins of said first link assembly, and a tongue connected to said base, and
- a female connecting lug having a base having a horizontal bore that receives one of said drive pins of said second link assembly, and
- a spaced apart upper lip and lower lip connected to said base, said male connecting lug tongue extending between said spaced apart lips, each of said lips and said tongue having openings therein that form a bore through the male and female lugs and receives said swivel pin and

swivel pin retaining means for retaining said swivel pin in said lugs, and

a first flight connected to one of said first and said second link assemblies, said flight having a flight head having two spaced apart indentations, each of which receives a different one of said first ends of said drive pins, and

first flight securing means retaining said drive pin first end in said first flight head so that said first flight head is paced from its respective side plate, and

a second flight connected to said one of said first and said second link assemblies, said flight having a flight head having two spaced apart indentations, each of which receives a different one of said second ends of said drive pins, and

second flight securing means retaining said drive pin second end of said second flight head so that said second flight head is spaced from its respective side plate.

'932 patent col. 4 l. 48–col. 6 l. 11.

CMM denied infringement and asserted defenses and counterclaims of invalidity, including that claim 2 failed the best mode requirement of 35 U.S.C. § 112. In October 2010, the district court issued a *Markman* opinion in which it construed the word “indentations” used in claim 2 to mean: “recessed or concaved areas . . . into which something can be inserted, but through which it cannot pass.” J.A. 85. That construction was not the definition

preferred by Joy, “indentations or openings,” or CMM, “notches.” J.A. 153.

After subsequent briefing, the district court granted summary judgment of noninfringement to CMM because it reasoned that the DA-350 could not meet the “two spaced apart indentations” limitation of claim 2 under the doctrine of equivalents.<sup>1</sup> Joy argued that limitation was met by the holes in the DA-350’s flight head through which pins passed. In the court’s view, however, its construction of “indentations” dictated that “indentations” were binary opposites of such holes. The court reasoned that Joy’s infringement claim had to fail under the all-elements rule because finding the holes in the DA-350 flight head to be equivalent to “indentations” would read the “two spaced apart indentations” limitation out of claim 2.

The district court also granted summary judgment in favor of CMM on invalidity of claim 2 for failing the best mode requirement. During discovery, the inventor of the ’932 patent (“’932 Inventor”) admitted that press-fitting was the preferred way to retain the drive pins in the side plates in the invention of claim 2 but that only welding was discussed in the patent as a means to do so. Despite evidence from both parties that press-fitting was a substitute for welding well-known to those of ordinary skill in the art, the district court held that the failure to disclose press-fitting as the best mode for the retaining means invalidated claim 2 under 35 U.S.C. § 112.

Joy timely appealed both grants of summary judgment and the construction of the term “indentations.”

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<sup>1</sup> Joy conceded that the DA-350 does not literally infringe claim 2, assuming, of course, that the district court’s construction of “indentations” was without error.

## DISCUSSION

We review *de novo* the district court's claim construction, grants of summary judgment, and application of the all-elements rule. See *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1330 (Fed. Cir. 2009); *Consol. Edison Co. of N.Y., Inc. v. Richardson*, 232 F.3d 1380, 1383 (Fed. Cir. 2000); *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998) (en banc).

## A. Claim Construction

The only relevant question of claim construction raised by Joy on appeal is whether the term “indentations” as used in claim 2 expressly excludes “holes.” We hold that it does and that the district court's construction properly limited the term to structures “into which something can be inserted, but through which it cannot pass.”

The ordinary meaning of the term “indentions” as used in claim 2 is unambiguous. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”). The term has a commonly accepted meaning that does not include a hole. See *Webster's Third International Dictionary* (1993) (defining “indentation” as “an angular cut” or “a notch” or “a small surface depression”); *Oxford English Dictionary* (2d ed. 1989) (defining “indentation” as a “cut, notch, or angular incision”); see also *Phillips*, 415 F.3d at 1314 (“In [cases in which the ordinary meaning of claim language may be readily apparent even to lay judges], general purpose dictionaries may be

helpful.”). There is nothing in the language of claim 2, or the written description, to indicate that the ’932 Inventor intended for the definition of the term “indentations” to extend beyond its ordinary meaning to include holes. As used in claim 2, “indentations” describe the parts of the flight head structure that receive the end of the drive pins—which do not pass through the indentations. *See* ’932 patent col. 5 l. 9–col. 6 l. 11. And while the written description uses the phrase “indentations or holes” to describe the flight head structure that receives the drive pin ends, *see* ’932 patent Abstract; col. 3 ll. 52-56, the ’932 Inventor’s use of the disjunctive “or” in that phrase indicates that he appreciated the commonly understood meaning of “indentations” as exclusive of holes. Given that indication, because the ’932 Inventor chose to only claim “indentations,” not “indentations or holes,” *see* ’932 patent col. 5 l. 9–col. 6 l. 11, we decline to extend the meaning of “indentations” beyond its ordinary one to include holes. Indeed, when the ’932 Inventor chose to indicate that a claim limitation encompassed a hole, he used the words “bore” or “opening.” *See* ’932 patent col. 1 ll. 53-56; col. 3 ll. 5-10; col. 4 ll. 55-56; col. 5 ll. 1-6; Fig. 2. The use of different claim terms to describe structures that include holes further solidifies our conclusion that the ordinary meaning of the term “indentations” in claim 2 does not. *See CAE Screenplates Inc. v. Heinrich Fielder GmbH & Co.*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (“In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings.”). The district court’s construction of the term “indentations” was correct.

### B. Noninfringement

In light of its construction of “indentations,” the district court held that CMM’s accused mining machine did

not infringe claim 2 under the doctrine of equivalents because of the all-elements rule. We agree. Given that the construction of “indentations” expressly excludes a hole, the holes in the accused flight head of the DA-350 cannot be equivalent to the indentations in the flight head of the invention of claim 2. If holes could be equivalent to “indentations” as construed, the limitation requiring “two spaced apart indentations” would be read out of claim 2. As the specification makes clear, the ’932 Inventor chose to claim “indentations,” not holes, in claim 2. *Compare* ’932 patent Abstract; col. 3 ll. 52-56 (stating that “indentations or holes” could be used in the flight head) *with* ’932 patent col. 5 l. 9–col. 6 l. 11 (claiming only “indentations”). In light of that deliberate choice by the inventor, which informed our understanding that “indentations” is limited to its commonly accepted meaning, we hold that holes do not satisfy the “indentations” limitation of claim 2 under the doctrine of equivalents. *See Asyst Techs., Inc. v Emtrak, Inc.*, 402 F.3d 1188, 1195 (Fed. Cir. 2005). Accordingly, because it cannot be reasonably disputed that a pin in CMM’s accused mining machine passes through the holes in its flight head, we affirm the grant of summary judgment of noninfringement to CMM.

### C. Best Mode

To establish that claim 2 fails the best mode requirement, CMM must by prove by clear and convincing evidence that the ’932 Inventor concealed a best mode of practicing his claimed invention from the public. *See Ajinomoto Co. v. Int’l Trade Comm’n*, 597 F.3d 1267, 1273 (Fed. Cir. 2010); *Young Dental Mfg. Co. v. Q3 Special Prods., Inc.*, 112 F.3d 1137, 1144 (Fed. Cir. 1997). Whether an inventor “concealed” the best mode of his invention from the public turns on whether “the inventor’s disclosure is adequate to enable one of ordinary skill

in the art to practice the best mode of the invention.” *Id.* (citation omitted). Press-fitting, which CMM asserts was concealed as the best mode for the drive pin retaining means, was a well-known substitute for welding to those of ordinary skill in the art at the time of the invention. There is no genuine dispute of the parties’ experts on that point. Thus, there is no genuine dispute that one of ordinary skill in the art had the requisite knowledge necessary to use press-fitting as the drive pin retaining means of claim 2. Accordingly, CMM cannot point to any clear and convincing evidence upon which a reasonable jury could rely to find that the omission of press-fitting from the written description of the ’932 patent “concealed” its use as a drive pin retaining means from the public. We therefore reverse the district court’s grant of summary judgment to CMM that claim 2 is invalid for failing the best mode requirement and remand to the district court to enter summary judgment in favor of Joy on that issue.<sup>2</sup>

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<sup>2</sup> Whether or not the relevant claim element (here, “means for retaining”) is written in means-plus-function form is immaterial to our conclusion. At its heart, the best mode requirement is concerned with preventing inventors from concealing the best mode of their inventions while being rewarded with the right to exclude others from making or using it. *See, e.g., Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1330 (Fed. Cir. 2002). An inventor does not conceal the best mode of an invention by disclosing only one of many modes for enabling a claim element when all of the other non-disclosed modes are already well-known substitutes in the art. One of ordinary skill in the art would not need to be reminded of those substitutes to practice the best mode of the invention.

## CONCLUSION

Because the district court properly construed the term “indentations” and the holes in the flight head of the DA-350 cannot satisfy the “two spaced apart indentations” limitation of claim 2 under the doctrine of equivalents, we affirm the grant of summary judgment of noninfringement to CMM. Because there is no evidence in the record upon which a reasonable jury could rely to find that the ’932 Inventor concealed the best mode for practicing the invention of claim 2, we reverse the district court’s grant of summary judgment to CMM on best mode and remand to the district court for entry of summary judgment in favor of Joy on that issue.

## COSTS

Each party shall bear its own costs.

**AFFIRMED-IN-PART, REVERSED-IN-PART, AND  
REMANDED**