

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FELIX LUDWIG

Appeal 2007-2463
Application 10/403,555
Technology Center 2800

Decided: October 19, 2007

Before JOSEPH L. DIXON, ROBERT E. NAPPI, and JOHN A. JEFFERY,
Administrative Patent Judges.

JEFFERY, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-10 and 17. We have jurisdiction under 35 U.S.C. § 6(b), and we heard the appeal on September 11, 2007. We affirm-in-part.

2. Claims 5, 8, 10, and 17 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kojima and Zigler.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs and the Answer for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

OPINION

I. The Anticipation Rejection

We first consider the Examiner's rejection of claims 1-4, 6, 7, and 9 under 35 U.S.C. § 102(b) as being anticipated by Kojima. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984); *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983).

Claims 1, 7, and 9

The Examiner has indicated how the claimed invention is deemed to be fully met by the disclosure of Kojima. Regarding independent claim 1, the Examiner contends that Kojima's end plate 21 corresponds to the recited "securing ring" and extends over the "bandage" (metal pipe 4). Such an

arrangement, the Examiner asserts, disposes the “securing ring” 21 (Kojima’s end plate) radially over the edge of the “bandage” 4 so as to substantially extend flush therewith (Answer 3-4).

Appellant argues that Kojima’s end plate 21 does not substantially extend *flush* with the bandage as claimed. Appellant emphasizes that the outer diameter of the end plate 21 is greater than that of the pipe to allow the projecting part to bend around the protrusion. According to Appellant, the claimed flush-mounted configuration is simply not attained with Kojima’s structure (Br. 4; emphasis added).

The Examiner contends that since claim 1 calls for the securing ring to *substantially* extend flush with the bandage, the qualifier “substantially” does not preclude the structure of Kojima (Answer 7). The Examiner also asserts that Kojima fully meets a “flush” mounting as claimed in view of the broad definition of the term.² Defining “flush” as “directly abutting or immediately adjacent,” according to the Examiner, is proper in view of Figure 1a of the present application which shows the securing ring 6 extending in a “slightly greater” radial direction than the bandage 5 (Answer 7).

Appellant notes that merely because the securing rings abuts or is disposed immediately adjacent the bandage is immaterial as to the *aligned or levelled relationship* between the securing ring and the bandage (Reply Br. 2-3; emphasis added). Appellant also refers to a dictionary which, according to Appellant, also reveals that the term “flush” is synonymous with “level.” *Id.*

² The Examiner cites a dictionary definition of “flush” as “directly abutting or immediately adjacent” (Answer 7).

Appellant adds that the recited qualifier “substantially...flush” merely accounts for minor variations, but cannot be interpreted to include Kojima’s *non-flush* positional relationship between the securing ring and the bandage. In fact, Appellant notes, Figure 1a of the present application actually justifies the use of such a qualifier since it exemplifies the difficulty in illustrating a precisely-levelled disposition (Reply Br. 3).

The issue before us, then, is relatively narrow: whether Kojima’s end plate 21 substantially extends *substantially flush* with the metal pipe 4, giving the term “flush” its broadest reasonable interpretation in light of the Specification. We conclude that it does.

At the outset, although no fewer than 11 different definitions are provided from Appellant’s dictionary excerpt (*see* Ev. App.), we find the most pertinent definition of “flush” is actually commensurate with the Examiner’s definition. According to Appellant’s dictionary definition, “flush” is defined as “4b: *directly abutting on or immediately adjacent to...*” *See* Ev. App. (citing P. 878 of Webster’s Third New International Dictionary) (emphasis added). Although this dictionary does indicate that the term “level” is synonymous with “flush,” we nevertheless find that the scope and breadth of the definition of “flush” noted above is simply not limited to level structures.

With this construction, we turn to Kojima. In our view, since the curled portion 21a of Kojima’s end plate (i.e., “securing ring”) 21 directly abuts, and is immediately adjacent to, the metal pipe 4 (i.e., the “bandage”), the “securing ring” is therefore at least substantially “flush” with the bandage under Appellant’s own definition of the term. Although this directly abutting structure of Kojima is not aligned and completely level as

contended by Appellant, for example, in Figure 1a of Appellant's disclosure, such disclosed characteristics of this particular type of flush mounting are simply not recited in claim 1. To confine the term "substantially flush" to this disclosed structure would, in effect, import limitations from the disclosure into the claims -- a practice that has been repeatedly denounced. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323, 75 USPQ2d 1321, 1334 (Fed. Cir. 2005) (citations and internal quotation marks omitted) ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments...[C]laims may embrace different subject matter than is illustrated in the specific embodiments in the specification.").

For at least the foregoing reasons, we will sustain the Examiner's rejection of independent claim 1. Moreover, since Appellant has not separately argued the patentability of dependent claims 7 and 9, they fall with claim 1. *See In re Nielson*, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987); *see also* 37 C.F.R. § 41.37(c)(1)(vii).

Claims 2, 3, and 6

We will also sustain the Examiner's rejection of dependent claim 2. While we agree with Appellant to the extent that claim 2 requires an end plate that is considered separate from the securing ring, nothing in the claim language precludes *different components of a unitary structure* to constitute a "securing ring" and "end plate" respectively.

That is, we find the flattened component of the structure corresponding to numeral 21 in Kojima reasonably constitutes an "end plate" as claimed. Not only does Kojima actually refer to this structure as an

“end plate,” this flattened portion also, at least in part, secures the magnets 3 in axial position as claimed. And, as noted above, the curled component 21a of the structure 21 reasonably constitutes a “securing ring.”

Since Kojima discloses all recited limitations of claim 2, we will sustain the Examiner’s rejection of claim 2. Moreover, since Appellant has not separately argued the patentability of dependent claims 3 and 6, they fall with dependent claim 2.

Claim 4

We will not, however, sustain the Examiner’s rejection of dependent claim 4. In our view, the flattened portion does not have an L-shaped configuration with axial and radial legs wherein the bandage edge is wound over the axial leg, as claimed. Even if we assume, without deciding, that the inner portion of the curled portion 21a could somehow be considered an “axial leg” of the “end plate” (thus forming a generally L-shaped structure), we still fail to see how bandage edge is wound over this axial leg. At best, the bandage edge merely abuts this structure. Since Kojima does not reasonably disclose all limitations of dependent claim 4, we will not sustain the Examiner’s rejection of this claim.

II. The Obviousness Rejection

We now consider the Examiner’s rejection of claims 5, 8, 10, and 17 under 35 U.S.C. § 103(a) as unpatentable over Kojima and Zigler. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir.

1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). Furthermore, “‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

If the Examiner’s burden is met, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Claims 5 and 10

Regarding dependent claim 5, the Examiner’s rejection finds that Kojima does not disclose shrinking the securing ring onto the end plate to fix the bandage edge therebetween. The Examiner, however, cites Zigler to show that such heat shrinking techniques are well known in the art and concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to heat shrink the securing ring onto the rotor of Kojima for a secure bond (Answer 5). Regarding dependent claim 10, the Examiner adds that Zigler’s bandage in Figure 10 is inwardly recessed and is inherently aligned with the securing ring (Answer 6).

We will not sustain the Examiner's rejection of dependent claims 5 and 10. At the outset, we note with respect to claim 5 that the term "shrunk" merely recites a product-by-process limitation which, absent evidence to the contrary, does not further limit the resulting apparatus structure.³ Nevertheless, the claim calls for shrinking the securing ring onto *the end plate* – the same end plate that was recited in claim 2. Although we agree with the Examiner to the extent that this end plate can be considered as a separate portion (i.e., the flattened portion) of the unitary structure shown in Figure 2 of Kojima, we fail to see how the securing ring 21a -- also a part of the same unitary structure -- can be shrunk onto this unitary "end plate," let alone fix the bandage edge therebetween.

To be sure, Zigler does teach heat-shrinking the outer steel shell 16 around the core 12 and surrounding magnets 22 (Zigler, col. 5, ll. 31-34; Fig. 2). Applying this teaching to Kojima, however, would still not result in the structure recited in claim 5. Although Zigler's shell 16 is crimped inwardly over the outer edges of end plate 14 in Figure 10 as the Examiner indicates (Answer 8), Zigler's shell is analogous to Kojima's "bandage" 4. *Compare* Figure 2 of Zigler *with* Figure 1 of Kojima. Applying Zigler's teaching in Figure 10 to Kojima would, at a minimum, necessitate crimping the edge of

³ Reciting how a product is made does not further limit the structure of the product itself. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). We therefore presume that such structures do not patentably distinguish over otherwise identical structures absent evidence to the contrary. *See In re Marosi*, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983) ("Where a product-by-process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.").

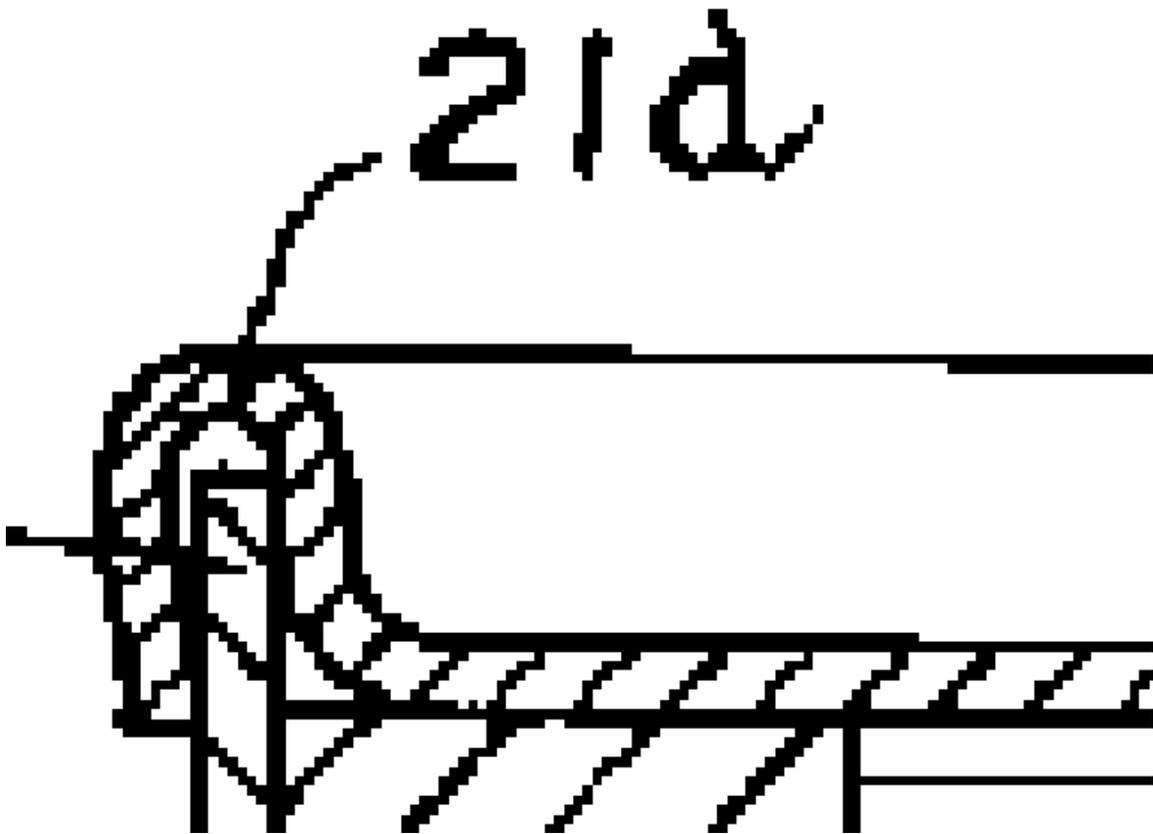
Kojima's "bandage" 4 and attached "securing ring" 21a radially inwardly to the integral "end plate" (i.e., the flattened portion) – a flattened portion that would also have to be inwardly recessed to achieve the alignment recited in claim 10.⁴ Such structural modifications to Kojima, in our view, simply would not have been reasonable, let alone obvious to the skilled artisan.

For the foregoing reasons, we will not sustain the Examiner's rejection of claims 5 and 10.

Claim 17

We will also not sustain the Examiner's rejection of claim 17. Since we find that the recited "end plate" is the flattened portion of the structure 21 in Kojima, the edge of bandage 4 is therefore not retained between this end plate and the integral securing ring. Rather, the bandage edge in Kojima is retained *within* the "securing ring" as shown in the enlarged detailed view of Figure 1 of Kojima below:

⁴ Although the Examiner contends on page 8 of the Answer that the "inwardly recessed end plate" recited in claim 10 is ostensibly not required on the end with the securing ring (and therefore the end plate structure shown in Figure 10 could allegedly be used on the upper end of Kojima's rotor), we find that the only reasonable structure in Kojima that corresponds to the end plate 14 in Zigler is Kojima's flattened portion of the end plate 21. Indeed, Kojima even refers to this structure (along with the integral curled "securing ring") as an "end plate." See P. 6-7, *supra*, of this opinion.



Enlarged Detailed View of Figure 1 of Kojima

Even if we assume, without deciding, that it would have been obvious to separate Kojima's "securing ring" from its corresponding integral end plate as the Examiner contends (Answer 6), the bandage edge would still be retained *within* the securing ring structure – not *between* the end plate and the securing ring as claimed. Although the bandage edge in Kojima is between the *leftmost portion* of the securing ring and the end plate as shown above, this portion is itself not a "securing ring." To hold otherwise would strain the interpretation of the term beyond reasonable limits. In our view, the entire curved portion 21a constitutes the "securing ring"; therefore, the

bandage edge cannot be between the end plate and the securing ring as claimed.

For the foregoing reasons, Kojima does not disclose nor render obvious the limitations of claim 17. Therefore, we will not sustain the Examiner's rejection of that claim.

Claim 8

We will, however, sustain the Examiner's rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Kojima and Zigler. Appellant did not separately argue the patentability of claim 8 with particularity. Therefore, Appellant did not persuasively rebut the Examiner's prima facie case of obviousness for this claim set forth on page 5 of the Answer. The rejection is therefore sustained.

DECISION

We have sustained the Examiner's rejections with respect to claims 1-3 and 6-9. We have not, however, sustained the Examiner's rejection with respect to claims 4, 5, 10, and 17. Therefore, the Examiner's decision rejecting claims 1-10 and 17 is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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