

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

*Ex parte STEFAN VOLZ, PETER SCHULER, ANDERS EKLUND, and
OLLE DANIELSON*

Appeal 2008-5326
Application 10/312,749
Technology Center 1700

Decided: September 24, 2008

Before CHARLES F. WARREN, ROMULO H. DELMENDO, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

DELMENDO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1-3 (Appeal Brief filed March 8, 2007, hereinafter “Br.”; Advisory Action mailed July 20, 2006; Final Office Action mailed February 22, 2006). We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

Appellants state they invented “a system for the surface treatment of [a] continuously traveling strip [e.g., special steel], especially to a pickling system in which the strip passes through a tank filled with the treatment liquid and sealed by a cover” (Specification, hereinafter “Spec.,” 1 and 3).

Claim 1, the sole independent claim on appeal, reads as follows:

1. System for the surface treatment of strips passing continuously through the system, especially a pickling system, in which the strip passes through a tank filled with the treatment liquid and sealed by a cover, wherein the interior bottom (7) of the tank (2) is designed as a trough in the transverse direction with an essentially horizontal central section (5), from each side of which slanting sections (6a, 6b) proceed downward.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Osarek	4,928,717	May 29, 1990
Berglind	5,958,147	Sep. 28, 1999
Hirai	JP 5-33175	Feb. 9, 1993 ¹

The Examiner rejected the claims as follows: (i) claim 1 under 35 U.S.C. § 102(b) as anticipated by Osarek or JP 5-33175; and (ii) claims 2 and 3 under 35 U.S.C. § 103(a) as unpatentable over Osarek or JP 5-33175 in view of Berglind (Examiner’s Answer mailed June 27, 2007, hereinafter “Ans.,” 3-4).

ISSUES

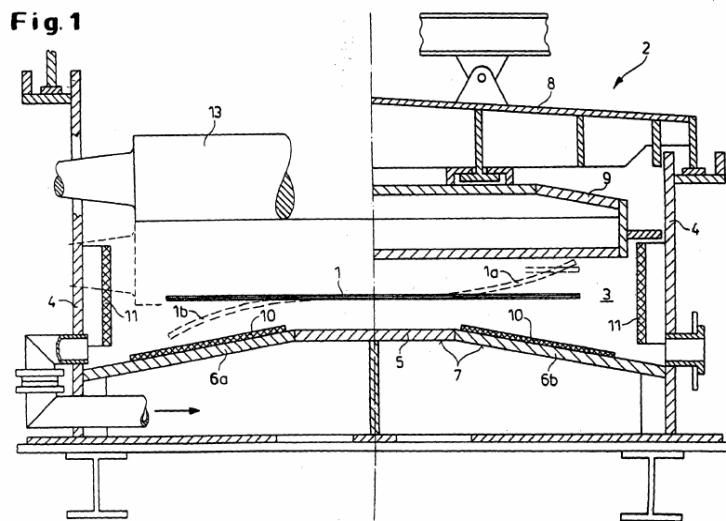
Have Appellants demonstrated error in the Examiner’s determinations that: (i) Osarek or JP 5-33175 describes every limitation of the invention recited in appealed claim 1; and (ii) a person having ordinary skill in the art

¹ We refer to the English language translation (dated June 2007) of record.

would have found the subject matter of appealed claims 2 and 3 obvious over Osarek or JP 5-33175 in view of Berglind?

FINDINGS OF FACT

1. Appellants' Figure 1 is reproduced below:



2. Appellants' Figure 1 is said to depict a cross section through a tank of the treatment system, wherein 1 is a strip material, 2 is a tank, 3 is a treatment channel, 4 defines long tank walls, 5 is a horizontal central section, 6a and 6b are slanted sections that slant downwards from the center toward both long walls, 8 is a cover, 9 is an intermediate cover or float, 10 is a wear plate, 11 denote side bars, and 13 are pinch rolls (Spec. 6-7).
3. Osarek, like Appellants, discloses "an equipment for surface treatment of continuously running strips[,] particularly pickling equipment wherein the strip runs longitudinally through a

horizontally arranged treatment channel which channel is arranged within a container enveloping the treatment channel and being closed by a lid" (col. 1, ll. 7-12).

4. Osarek's Figure 2 is reproduced below:

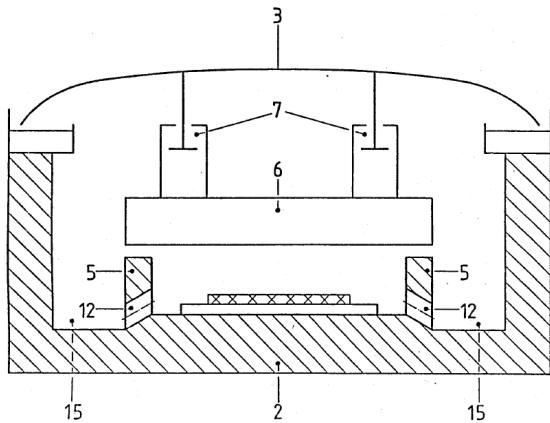


FIG. 2

5. Osarek's Figure 2 is said to depict a cross section in the center of the treatment channel, wherein 2 is a container, 3 is a lid, 5 denote channel side walls, 6 is an intermediate cover, 7 and 12 denote reference numerals, and 15 denote troughs (col. 2, ll. 67-68; col. 3, ll. 3-55).
6. JP 5-33175 also describes a jet pickling apparatus for pickling strip steel with a jet pickling liquor (¶0001).
7. Figure 2 of JP 5-33175 is reproduced below:

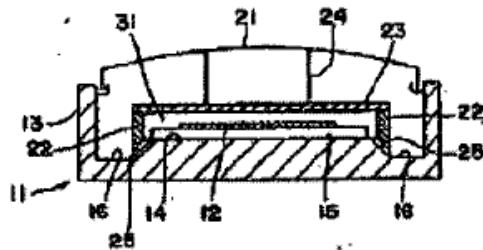


Figure 2

8. Figure 2 of JP 5-33175 is said to depict a cross-sectional view of the tank, wherein 11 is a tank body, 12 is strip steel, 13 is a side wall, 14 is a tank underside, 15 is a skid, 16 is a drain path, 21 is a cover, 22 is a side wall, 23 is a tank inner cover, and 25 is a an opening. (¶¶0012 and 0028).
9. Berglind teaches a method of pickling or surface treating a metal in a solution containing nitric acid to which hydrogen peroxide is supplied to decrease the formation of nitrous fumes (col. 1, ll. 5-8).

PRINCIPLES OF LAW

“To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

“Section 103 forbids issuance of a patent when ‘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.’’ *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1734 (2007).

KSR reaffirms the analytical framework set out in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), which states that an objective obviousness analysis includes: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; and (3) resolving the level of ordinary skill in the pertinent art. *KSR*, 127 S. Ct. at 1734. Secondary considerations such as commercial success, long felt but unsolved needs or failure of others ““might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.”” *Id.* (*quoting Graham*, 383 U.S. at 17-18).

While *KSR* rejected a formalistic and rigid application of the teaching, suggestion, or motivation test as an exclusive test in the obviousness inquiry, it nevertheless made clear that an invention “composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 127 S. Ct. at 1741. The Supreme Court stated that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine elements in the way the claimed new invention does.” *Id.*

ANALYSIS

Appellants contend that neither Osarek nor JP 5-33175 discloses a channel bottom “that in the transverse direction is shaped as a trough with a horizontal central section from each side of which a slanting section proceeds downwardly, as in the presently claimed invention” (Br. 6). The Examiner, on the other hand, argues that “the draining ports (12) [of, e.g.,

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Osarek], which slant from the bottom of the trough. . . . read on the claimed trough having a bottom central section” (Ans. 4).

The Examiner is incorrect. As shown in Figure 2 of Osarek and Figure 2 of JP 5-33175, no slanting sections “proceed” downwardly from the sides of the horizontal central section (Facts 3-8). In Osarek, channel side walls 5 define a rectangular trough 15. Similarly, side wall 22 of JP 5-33175 also defines a rectangular opening 25. Thus, the prior art systems differ from appealed claim 1, as exemplified in Appellants’ Figure 1 (Facts 1-2).

Accordingly, the Examiner erred in finding that Osarek or JP 5-33175 anticipates claim 1.

With respect to the 35 U.S.C. § 103(a) rejection, because the Examiner did not rely on Berglind to cure the deficiency in Osarek we found in considering the 35 U.S.C. § 102(b) rejection, we likewise reverse the 35 U.S.C. § 103(a) rejection of claims 2 and 3 (Ans. 3-4; Fact 9).

CONCLUSION

On this record, we determine that Appellants have shown errors in the Examiner’s determinations that: (i) Osarek or JP 5-33175 describes every limitation of the invention recited in appealed claim 1; and (ii) a person having ordinary skill in the art would have found the subject matter of appealed claims 2 and 3 obvious over Osarek or JP 5-33175 in view of Berglind.

DECISION

The Examiner’s decision to reject appealed claims 1-3 is reversed.

REVERSED

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