

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JAE-NAM KIM

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Appeal No. 2001-0255  
Application 08/733,567

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HEARD: JUNE 13, 2002

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Before JERRY SMITH, DIXON and LEVY, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-11, which constitute all the claims in the application.

The disclosed invention pertains to a speaker system for improving the sound quality emanating from a speaker. Specifically, a sound wave amplifying horn is coupled to the speaker for collecting and amplifying only a portion of the sound waves which radiate from the rear of the speaker frame.

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Representative claim 1 is reproduced as follows:

1. A speaker system comprising:

a speaker having a cone which converts an electric signal into a sound wave signal;

a frame attached to a rear side of said speaker and having a plurality of sound wave radiating holes formed therein; and

a sound wave amplifying horn for amplifying and radiating only a portion of sound waves which are radiated from the rear side through said frame.

The examiner relies on the following references:

Jung	5,206,465	Apr. 27, 1993
Sugimoto et al. (Sugimoto)	5,604,337	Feb. 18, 1997
		(filed Feb. 10, 1995)

Claims 1-4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Jung. Claims 5-11 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Jung alone with respect to claim 5, and Jung in view of Sugimoto with respect to claims 6-11.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

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OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon by the examiner does not support the rejection of any of the claims on appeal. Accordingly, we reverse.

We consider first the rejection of claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Jung. 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.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and

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Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Claims 1-4 stand or fall together as a single group [brief, page 5]. The rejection is set forth on page 2 of the final rejection [Paper No. 7] which is incorporated into the examiner's answer [answer, page 3]. With respect to representative, independent claim 1, appellant argues that Jung discloses that all the sound waves radiating from the cut-out portions of the speaker are collected by the sound collecting tubes which is contrary to the claimed invention which collects only a portion of the sound waves [brief, pages 5-8]. The examiner responds that in the fourth, fifth and sixth embodiments of Jung, the horn amplifies and radiates only a portion of the sound waves which are radiated from the rear side through the frame [answer, pages 3-4]. Appellant responds that the examiner has misinterpreted the structure of the fourth, fifth and sixth embodiments of Jung [reply brief].

We agree with the position argued by appellant for essentially the reasons explained in the reply brief. The disclosure of Jung does not support the examiner's interpretation. Specifically, with respect to the fourth embodiment, for example, Jung discloses that "[b]ecause the inlet

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end shrouds three quadrants of the back of the loudspeaker, the number of trapezoidal cut-outs formed in the back of the loudspeaker is not of concern, as long as the three quadrants fully cover the trapezoidal quadrants formed within the inlet end, and there is no undue interference from the frame reverberating sound passing therethrough" [column 7, line 62 to column 8, line 1 (emphasis added)]. We agree with appellant that this disclosure can only mean that all cut-outs in the frame of the speaker must be covered by the inlet end of the sound collecting device. Since Jung does not disclose the structure of representative claim 1, we do not sustain the examiner's rejection of claims 1-4.

We now consider the rejection of claims 5-11 under 35 U.S.C. § 103. 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 is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to

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modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant 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 Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d

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1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived by appellant [see 37 CFR § 1.192(a)].

Claim 5 is rejected based on Jung taken alone. Claims 6-11 are rejected based on Jung in view of Sugimoto. Since each of these rejections relies on the examiner's improper interpretation of the disclosure of Jung, the rejections fail to set forth a prima facie case of obviousness. We note that the additional teachings of Sugimoto do not overcome the basic deficiencies in Jung discussed above. Since the examiner has not established a prima facie case of obviousness, we do not sustain the rejection of claims 5-11.

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In summary, we have not sustained any of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-11 is reversed.

REVERSED

	)	
JERRY SMITH	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JOSEPH L. DIXON	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
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STUART S. LEVY	)	
Administrative Patent Judge	)	

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