

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROMAN SAPIEJEWSKI

Appeal No. 2001-0261
Application 08/546,050¹

HEARD: January 9, 2003

Before JERRY SMITH, BARRETT, and RUGGIERO, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-45.

We reverse.

¹ Application for patent filed October 20, 1995, entitled "In-the-Ear Noise Reduction Headphones."

BACKGROUND

The invention relates to an in-the-ear earphone having a curved shape to fit into the concha of a user's ear.

Claim 1 is reproduced below.

1. An in-the-ear earphone which is placed on a user's ear, said earphone comprising:

a shell body defining an internal cavity, said shell body having an extended portion shaped and sized to fit into a concha of the user's ear, said extended portion including an aperture at an end thereof which aligns with the user's ear when said earphone is being worn by the user, said extended portion defining a passageway extending from said aperture to said internal cavity so that said internal cavity is acoustically coupled to the user's ear cavity when the headphone [sic, earphone] is being worn by the user,

said extended portion being curved along substantially its entire length to substantially match the curvature of said concha and allow attachment around said extended portion of a cushion for establishing a seal between said extended portion and the user's ear.

The examiner relies on the following references:

Jensen	5,134,655	July 28, 1992
Sapiejewski (Sapiejewski '868)	5,208,868	May 4, 1993
Sapiejewski (Sapiejewski '387)	5,305,387	April 19, 1994
Vermorel et al. (Vermorel)	FR 2,604,551	April 1, 1988
Gorlke	DE 32 10 034	September 30, 1982

Claim 3 stands rejected under 35 U.S.C. § 101 as being a substantial duplicate of claim 4.

Claims 1-5, 7, 14-17, 20-22, 32-34, and 43-45 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sapiejewski '387.

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Claims 3, 4, 6, 10-13, 18, 19, 35, and 37-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sapiejewski '387.

Claim 29 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sapiejewski '387 and Sapiejewski '868.

Claims 17, 20, 21, 23-25, 27, 29-31, and 43-45 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sapiejewski '868.

Claims 26 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sapiejewski '868.

Claims 1, 7-9, 17, 20, 36, 41, and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vermorel in view of either Gorlke or Jensen.

We refer to the final rejection (Paper No. 5) (pages referred to as "FR__") and the examiner's answer (Paper No. 12) (pages referred to as "EA__") for a statement of the examiner's rejection, and to the brief (Paper No. 11) (pages referred to as "Br__") and reply brief (Paper No. 14) (pages referred to as "RBr__") for a statement of appellant's arguments thereagainst.

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OPINION

Duplicate claim

Appellant explains in the reply brief (Paper No. 14) received August 26, 1999, that an error was made in amending claim 4 to depend from claim 2 in amendment A (Paper No. 4) in that the words of claim 3 were mistakenly copied. An amendment B (Paper No. 13) was filed by facsimile on August 24, 1999, which corrects the mistake. The examiner notes on the amendment that it should not be entered and states that "[t]he amendment B filed on 8/24/99 has not been entered since the limitation in claim 4 has been changed" (Paper No. 15). However, the amendment has been entered, evidently inadvertently.

It is obvious that something was wrong with claim 4 in amendment A because the claim has changed but there is no underlining or brackets to indicate an amendment. Thus, amendment B returns claim 4 to its original form and has not been changed as stated by the examiner, except to change the claim dependency. There should be no objection to correcting a clerical error. Nevertheless, a duplicate claim is not grounds for rejection under 35 U.S.C. § 101 because both claims would appear in the same patent and there would not be two patents with the same claim. The Manual of Patent Examining Procedure (MPEP) has been changed to state that a duplicate claim should be objected to under 37 CFR § 1.75, MPEP § 706.03(k) (6th ed.,

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Rev. 3, July 1997) (in effect at the time of the examiner's answer, but not in effect at the time of the final rejection), rather than being rejected without giving any statutory basis, MPEP § 706.03(k) (6th ed., Rev. 2, July 1996). The rejection of claim 4 under 35 U.S.C. § 101 is reversed.

Sapiejewski '387 and '868

Appellant argues (Br9-10; Br13; RBr3-4) that Sapiejewski '387 and '868 do not disclose the limitation "said extended portion being curved along substantially its entire length to substantially match the curvature of said concha and to allow attachment around said extended portion of a cushion for establishing a seal between said extended portion and the user's ear" because they show a flat horizontal side at the bottom and a sloping flat side at the top in the structure corresponding to the extended portion. It is also argued that the references teach away from the limitation by disclosing a custom snap-on ear cavity mold.

The examiner finds that "the entire length of the extended portion (14B) of Sapiejewski (U.S. patent no. 5,305,387 and U.S. patent no. 5,208,868) is curved inwardly toward the inside [of] the ear canal (also see column 1, lines 36-41)" (EA12; FR13).

Initially, we note that the limitation at issue is "said extended portion being curved along substantially its entire

length to substantially match the curvature of said concha." The rest of the limitation, "to allow attachment around said extended portion of a cushion for establishing a seal between said extended portion and the user's ear," is a statement of intended use which does not expressly make the cushion part of the combination, as evidenced by claim 2, but which structurally limits the extended portion to being able to accept a cushion. Thus, the extended portion need only be capable of attaching a cushion. The limitation of the extended portion being curved along substantially its entire length seems to require the whole extended portion to be curved as shown in Fig. 4B.

While the outside surface of the cushion 16 in Sapiejewski '387 and '868 is curved at the top, the extended portion of 14 to which the cushion is attached is straight at the top and bottom. Thus, the examiner erred in finding that the Sapiejewski references teach "said extended portion being curved along substantially its entire length to substantially match the curvature of said concha" as recited in claims 1 and 17. The anticipation rejections of claims 1-5, 7, 14-17, 20-25, 27, 29-34, and 43-45 based on Sapiejewski '387 and/or Sapiejewski '868 are reversed. The obviousness rejections of claims 3, 4, 6, 10-13, 18, 19, 26, 28, 29, 35, and 37-40 based on Sapiejewski '387 and/or Sapiejewski '868 do not cure the deficiencies with respect to the rejections of claims 1 and 17 and are reversed.

Vermorel and Gorlke or Jensen

Appellant argues that Vermorel fails to teach a cushion which is attached to the extended portion 12, but teaches having the uncushioned extended portion fit so snugly in the auditory canal 13 that it would be impossible to put a cushion as disclosed and claimed and that nothing in the secondary references suggests the desirability of combining what is there disclosed to meet the limitations of the claims (Br24). It is argued that the rejection is based on hindsight (RBr6).

The examiner states that providing a cushion for an earphone was very well known in the art and since Gorlke and Jensen teach a cushion over an earpiece inserted into the ear canal, it would have been obvious to provide such a cushion in Vermorel (EA13).

Vermorel discloses a hollow plug 12 of compressible semi-rigid material which is introduced into the external auditory canal 13 of the user (translation, p. 8). The hollow plug 12 is attached to a cover 19 having an internal cavity filled with a sound absorbing material 20 (translation, p. 9). The cover 19 and hollow plug 12 together form a shell body where the hollow plug 12 is an extended portion. The hollow plug 12 corresponds to the claimed "extended portion shaped and sized to fit into the concha of the user's ear" because the external auditory canal 13 is considered to roughly correspond to the concha. Vermorel has a microphone 16 and speaker 15 positioned

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in the hollow plug 12 (i.e., the extended portion) as recited in claim 17. The difference between Vermorel and the subject matter of claims 1 and 17 is that the hollow plug 12 in Vermorel does not have a cushion and, because it conforms to the shape of the external auditory canal 13 to adhere hermetically (translation, p. 8), it is not of a size that allows attachment of a cushion.

The rejection does not account for, or provide motivation for, the modification that the hollow plug 12 in Vermorel would have to be made smaller to accommodate a cushion. The cushion in Gorlke is designed to fit over a support element 2 and the cushion in Jensen is designed to fit over a projection 5 to cushion the ear. The examiner has not explained how such cushions would be modified to be used on the hollow plug 12 in Vermorel since the plug will not fit into the ear canal with a cushion over it. The cushion 16 in the Sapiejewski patents is attached over an extended portion and the size of the extended portion and the cushion are sized "to provide comfort and seal" (Sapiejewski '387, col. 2, lines 65-66) inside the ear concha. However, the examiner has not argued that it would have been obvious to use a cushion over the extended portion in Vermorel in view of the Sapiejewski patents or to make the extended portion with its cushion in the Sapiejewski patents curved along substantially its entire length in view of Vermorel. We conclude that the examiner has failed to establish a prima facie case of

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obviousness. The rejection of claims 1, 7-9, 17, 20, 36, 41, and 42 over Vermorel in view of Gorlke or Jensen is reversed.

CONCLUSION

The rejections of claims 1-45 are reversed.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LEE E. BARRETT)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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