

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KARI LAURILA
and OLLI VIKKI

Appeal No. 2002-2207
Application 09/057,729

ON BRIEF

Before KRASS, JERRY SMITH, and FLEMING, 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 1-14, which constitute all the claims in the application. An amendment after final rejection was filed on June 29, 2001 and was entered by the examiner.

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The disclosed invention pertains to a method and apparatus for use in the field of speech recognition.

Representative claim 1 is reproduced as follows:

1. A method for recognising speech, wherein a recognisable speech signal is divided in time into successive frames of specific length, each speech frame is analysed for producing at least one parameter per frame, illustrating the speech signal, said parameters, relating to each frame, are stored in a sliding buffer for minimizing the delay due to the normalization process for calculation of normalisation coefficients for each frame, said parameters are modified utilising said normalisation coefficients and speech recognition is carried out utilising the modified parameters, wherein only part of the successive parameters are stored periodically and at least one parameter is modified on the basis of the parameters stored periodically in order to produce said modified parameter, and for said modification, a standard deviation of said periodically stored parameters is defined, wherein only part of the stored parameters are used at the beginning of the speech recognition.

The examiner relies on the following references:

Satoh et al. (Satoh)	5,293,588	Mar. 08, 1994
Kroeker et al. (Kroeker)	5,369,726	Nov. 29, 1994

Claims 1-14 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Satoh in view of Kroeker.

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

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection 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 and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-14. Accordingly, we reverse.

Appellants have indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 3]. Consistent with this indication appellants have made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims before us will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Therefore, we will consider

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the rejection against independent claim 1 as representative of all the claims on appeal.

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 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.

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

The examiner has indicated how he finds the claimed invention to be obvious over the combined teachings of Satoh and Kroeker [answer, pages 3-5]. With respect to representative, independent claim 1, appellants argue that the claimed invention recites that normalization coefficients are calculated and stored in a buffer for each speech frame whereas in Satoh, normalization coefficients are only calculated for noise frames and only the noise frames get stored in the buffer. Appellants note that the claimed invention has the advantage that there is no need to

distinguish between speech and noise. Appellants also argue that Kroeker does not make up for the deficiencies in Satoh [brief, pages 4-6]. The examiner responds that appellants have not considered the correct portion of Satoh. The examiner asserts that Figure 6 of Satoh and the corresponding portion of the disclosure teach that each frame of incoming signals are processed as recited in claim 1 [answer, pages 6-7]. Appellants respond that the examiner is incorrect in assessing the manner in which Figure 6 of Satoh operates. Specifically, appellants argue that only the noise frames in Satoh are stored in buffer 109 of Figure 6 and not each frame of data as claimed [reply brief].

We will not sustain the examiner's rejection of claims 1-14 for essentially the reasons argued by appellants in the briefs. We agree with appellants that the examiner's understanding of the manner in which the embodiment shown in Satoh's Figure 6 operates is wrong. As noted by appellants, the buffer shown in Figure 6 of Satoh stores calculated parameters of only those input frames which are judged to be noise by judging unit 111 and not the frames judged to be speech [column 7, lines 14-22]. Thus, neither Satoh nor Kroeker teaches the calculation of normalization coefficients for each frame of input data regardless of whether the frame contains speech or noise. The

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examiner's erroneous findings result in a failure by the examiner to establish a prima facie case of obviousness.

In summary, we have not sustained the examiner's rejection of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-14 is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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JERRY SMITH)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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MICHAEL R. FLEMING)	
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