UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JASON RAYMOND BAUMGARTNER, NADEEM MALIK, and
STEVEN LEONARD ROBERTS

Appeal 2007-1982
Application 09/460,832
Technology Center 2600

Decided: November 14, 2007

Before JOHN C. MARTIN, JEAN R. HOMERE, and
MARC S. HOFF, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1 through 4, 6 through 9, 11 through 17, and 19 through 26. Claims 5, 10, and 18 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b) to decide this appeal. We affirm in part.

The Invention

Appellants invented a method and system for converting text-based information into audio-based information by dedicating a first and a second multimedia dictionary to a first and a second speaker, respectively. (Spec. 2.)

An understanding of the invention can be derived from exemplary independent claim 1, which reads as follows:

1. A system for generating multimedia information, comprising:

an interface suitable for receiving an email message;

a text converter configured to receive the email message and adapted to decompose text in the message into a set of diphthongs;

a first multimedia dictionary configured to received diphthongs produced by the text converter and adapted to produce a set of digitized samples of multimedia information representative of the received diphthongs wherein the digitized samples are created by sampling the speech of a first speaker; and

a second multimedia dictionary configured to receive diphthongs produced by the text converter and responsive thereto, to retrieve a set of digitized samples created by sampling the speech of a second speaker wherein the set of digitized samples retrieved from the first multimedia dictionary responsive to at least one diphthong differs from the set of digitized samples retrieved from the second multimedia dictionary responsive to the same at least one diphthong.

In rejecting the claims on appeal, the Examiner relies upon the following prior art:

Witteman	US 6,243,676 B1	Jun. 5, 2001
Henton	US 6,122,616	Sep. 19, 2000

Hata	US 5,878,393	Mar. 2, 1999
Holm	US 5,850,629	Dec. 15, 1998
Narayan	US 5,717,827	Feb. 10, 1998
Malsheen	US 4,979,216	Dec. 18, 1990

The Examiner rejects the claims on appeal as follows:

A. Claims 1, 6, 7, 9, 11, 12, 14, 19 through 21, 23, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Narayan and Holm.

B. Claims 2, 3, 13, 16, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Narayan, Holm, and Hata.

C. Claims 4, 17, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Narayan, Holm, and Malsheen.

D. Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Narayan, Holm, and Witteman.

E. Claims 8 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Narayan, Holm, and Henton.

First, Appellants contend that the combination of Narayan and Holm does not render claims 1 and 23 unpatentable. Particularly, Appellants contend that the cited references do not teach or suggest multiple multimedia dictionaries where a first dictionary contains digitized speech samples of a first speaker, and a second dictionary contains digitized speech samples of a second speaker. (App. Br. 10.) In response, the Examiner contends that Narayan's disclosure of a text-to-speech conversion system in combination with knowledge of the prior art, evidenced by Holm's disclosure of multimedia dictionaries where a first dictionary contains speech samples of a male speaker and another dictionary contains speech samples of a female

speaker, teaches the invention. (Answer 14-15.) Next, Appellants contend that the combination of Narayan and Holm does not render claims 9 and 11 unpatentable since it does not teach selecting between a first and a second multimedia dictionaries based on the author of the text-based message. (App. Br. 11-12.) In response, the Examiner contends that the Narayan-Holm combination, by allowing a user to select a male or a female speaker associated with a corresponding dictionary from a plurality of dictionaries, implicitly teaches that the selected speaker is the author of an incoming text message. (Answer 17.)

ISSUE

The *pivotal* issue in the appeal before us is as follows:

Have Appellants shown[1] that the Examiner failed to establish that the combined disclosures of Narayan and Holm render the claimed invention

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[1] In the examination of a patent application, the Examiner bears the initial burden of showing a prima facie case of unpatentability. *In re Piasecki,* 745 F.2d 1468, 1472 (Fed. Cir. 1984). When that burden is met, the burden then shifts to the applicant to rebut. *Id.*; *see also In re Harris*, 409 F.3d 1339, 1343-44 (Fed. Cir. 2005) (finding rebuttal evidence unpersuasive). If the applicant produces rebuttal evidence of adequate weight, the prima facie case of unpatentability is dissipated. *Piasecki*, 745 F.2d at 1472. Thereafter, patentability is determined in view of the entire record. *Id.* However, Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

unpatentable under 35 U.S.C. § 103(a)? Particularly, does Narayan's disclosure of a text-to-speech conversion system in combination with Holm's disclosure of first and second dictionaries containing speech samples of a male and female, respectively, render the claimed invention unpatentable?

FINDINGS OF FACT

The following findings of fact are supported by a preponderance of the evidence.

The Invention

1. Appellants invented a method and system for converting an e-mail text into speech by dedicating a first and a second multimedia dictionary (106) to a first and a second speaker, respectively. (Spec. 9.)

2. As depicted in Figure 1, upon receiving an e-mail text (101), an interface (102) generates a text file (103), and forwards it to a text converter (104) to generate a plurality of diphthongs (105). The text converter subsequently transmits the diphthongs to a multimedia dictionary (106) containing the digitized speech samples. The resulting digital speech signals are then output to the e-mail recipient via a speaker (110.) (*Id*. 6-7.) The speech samples can be created by sampling the speech of a particular speaker (*id*. 9:1-2), such as a celebrity. (*Id*. 9:9-11.)

3. The invention may include a plurality of multimedia dictionaries (106), each dictionary containing digitized speech samples for each person from whom a user regularly receives e-mail correspondence. In this embodiment, the digitized samples 302 of a first dictionary, for

example, would contain digitized representations of a first speaker's speech patterns, while the digitized samples 302 of a second dictionary would include the digitized representations of a second speaker's speech patterns. This embodiment of the invention further includes facilities for identifying the author or originator of the e-mail text in order to select the dictionary corresponding to the identified author. (*Id*. 9.) For example, the first dictionary may be selected if the first speaker is the author of the mail text. (*Id*. 3:3-4; 10:2-5.)

The Prior Art Relied Upon

4. As shown in Figure 2, Narayan discloses a text-to-speech system wherein an incoming e-mail is translated into diphone strings via a TTS (text-to-speech) dictionary. The resulting diphone strings are decompressed to generate vectors of quantized samples. The input text is also analyzed to generate intonation control data to adjust the duration and pitch of the diphone data frames. (Col. 1, ll. 28-32; col. 5, ll. 37-52.)

5. Holm discloses a TTS conversion system wherein a user is allowed to configure a TTS engine at start up. Particularly, the user can load one of a plurality of user-defined dictionaries from a list of currently available dictionaries to designate how the TTS will sound. (Col. 6, ll. 18-29.)

6. Holm further discloses that the TTS engine uses sampled sounds of a female voice and sample sounds of a male voice. (Col. 6, ll. 55-57.)

PRINCIPLES OF LAW

OBVIOUSNESS (Prima Facie)

The Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, (1966), stated that the following factual inquiries underpin any determination of obviousness:

> Under § 103, [1] the scope and content of the prior art are to be determined; [2] differences between the prior art and the claims at issue are to be ascertained; and [3] the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such [4] secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

Where the claimed subject matter involves more than the simple substitution one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness must be based on "an apparent reason to combine the known elements in the fashion claimed." *KSR Int'l v. Teleflex, Inc*., 127 S. Ct. 1727, 1740-41 (2007). That is, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id*. at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Such reasoning can be based on interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR*, 127 S. Ct. at 1740-41.

ANALYSIS

We begin our analysis by noting that independent claim 1 recites first and second multimedia dictionaries containing speech samples of first and second speakers, respectively. (App. Br., Claim Appendix.) We find that Narayan's disclosure in combination with Holm's disclosure reasonably teaches this limitation.

As detailed in the Findings of Fact section above, we have found that Narayan, similarly to the claimed invention, discloses a TTS system that converts an incoming e-mail text into speech. (Finding 4.) We have also found that Holm discloses a TTS system having an engine with speech samples of a male or a female voice. (Finding 6.) Additionally, we have found that Holm discloses that a user can configure any of the currently available multimedia dictionaries to designate how the TTS engine will sound. (Finding 5.) Therefore, we find that one of ordinary skill would have readily recognized that Narayan's apparatus, taken in combination with Holm's disclosure, would have *predictably* resulted in a TTS system for converting an incoming e-mail text into speech based on first and second multimedia dictionaries, one having the sampled speech of a female voice and the other having the sampled speech of a male voice.[2] The ordinarily

[2] "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). The Supreme Court has held that in analyzing the obviousness of combining elements, a court need not find specific teachings, but rather may consider "the background knowledge possessed by a person having ordinary skill in the

skilled artisan would have thus recognized that the Narayan-Holm combination provides a user with the option of selecting the voice of male or a female speaker in respective multimedia dictionaries to listen to an incoming e-mail. It follows that the Examiner did not err in rejecting independent claim 1as being unpatentable over the combination of Narayan and Holm.

Appellants did not provide separate arguments with respect to the rejection of claims 2 through 4, 6 through 8, 12 through 17, and 19 through 26. Therefore, we select independent claim 1 as being representative of the cited claims. These claims consequently fall together with representative claim 1. *See In re Young,* 927 F.2d 588, 590 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii).

Claims 9 and 11

We note that claim 9 requires selecting between the first and second multimedia dictionaries "responsive to determining an author of the text-based message," while claim 11 more particularly specifies that "the first multimedia dictionary is selected if the first speaker is the author of the text-based message." (App. Br., Claims Appendix.) As set forth in the Findings of Fact section above, we found that the Narayan-Holm combination is limited to allowing a user to select a dictionary based on whether the user

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art" and "the inferences and creative steps that a person of ordinary skill in the art would employ." *See KSR*, 127 S. Ct. at 1740-41. To be nonobvious, an improvement must be "more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

wishes to listen to the incoming e-mail text message in a male or female voice. However, we did not find in the cited combination any teaching linking the author of the e-mail text to the selection of the speaker. It appears to us that the options disclosed in the Narayan-Holm combination for selecting a male or female voice to listen to the incoming message is not tied to the author of the incoming text message itself. Therefore, one of ordinary skill in the art would have readily recognized that the proffered combination is devoid of any teaching of selecting a dictionary based on the author of the text-based message. It follows that the Examiner erred in rejecting dependent claims 9 and 11 as being unpatentable over the combination of Narayan and Holm.

CONCLUSIONS OF LAW

On the record before us, Appellants have not shown that the Examiner failed to establish that the combination of Narayan' s disclosure and Holm's disclosure renders claims 1 through 4, 6 through 8, 12 through 17, and 19 through 26 unpatentable under 35 U.S.C. § 103(a). Appellants have, however, shown that the Examiner failed to establish that the combination of Narayan' s disclosure and Holm's disclosure renders claims 9 and 11 unpatentable under 35 U.S.C. § 103(a).

DECISION

We have affirmed the Examiner's decision rejecting claims 1 through 4, 6 through 8, 12 through 17, and 19 through 26. However, we have reversed the Examiner's decision rejecting claims 9 and 11.

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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