

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* ANTONIO J. COLMENAREZ,  
HUGO J. STRUBBE, and SRINIVAS GUTTA

---

Appeal 2006-0762  
Application 09/822,121<sup>1</sup>  
Technology Center 2600

---

Decided: July 23, 2007

---

*Before:* JOSEPH L. DIXON, JEAN R. HOMERE and JAY P. LUCAS,  
*Administrative Patent Judges.*

LUCAS, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal from a final rejection of claims 1 to 25 under authority of 35 U.S.C. § 134. The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

---

<sup>1</sup> Application filed March 30, 2001. The real party in interest is Koninblijke Philips Electronic, NV, a corporation of the Netherlands.

Appellants' invention relates to a method and apparatus for video conferencing in which a speaker in the conference is automatically located by processing both the audio and the video signals. Once located, the camera can focus on the speaker by electronically panning, tilting and zooming the image. In the words of the Appellants:

The present invention relates to a method and apparatus for a video conferencing system using an array of two microphones and a stationary camera to automatically locate a speaker and electronically manipulate the video image to produce the effect of a movable pan tilt zoom ("PTZ") camera.

(Specification 1).

Claim 1 is exemplary:

1. A video conferencing system comprising:

a stationary image pickup device, remaining motionless during operation, for generating image signals representative of an image;

an audio pickup device for generating audio signals representative of sound from an audio source; and

means for processing said image signals and said audio signals to determine a direction of the audio source relative to a reference point, the determination of direction depending at least at times on the image signals.

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

Baker	US 5,686,957	Nov. 11, 1997
Chu	US 5,788,082	Jul. 7, 1998
Malkin	US 6,704,048 B1	Mar. 9, 2004 (filed Aug. 27, 1998)
Potts	WO 99/60788	Nov. 25, 1999

Rejections:

Group I: Claims 1 to 8 and 10 to 24 stand rejected under 35 U.S.C. § 103(a) for being obvious over Potts in view of Baker or Malkin.

Group II: Claims 9 and 25 stand rejected under 35 U.S.C. § 103(a) for being obvious over Potts in view of Baker or Malkin and further in view of Chu.

Appellants contend that the claims are not rendered obvious by Potts and the other references for failure to make a prima facie case and for other specific reasons to be discussed more fully below. The Examiner contends that each group of claims is properly rejected.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for their respective details. 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 Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).<sup>2</sup>

We affirm all of the rejections.

---

<sup>2</sup> Appellants have not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group, except as will be noted in this opinion. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young*, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii).

## ISSUE

The issue is whether Appellants have shown that the Examiner erred in rejecting the claims 1 to 25 under 35 U.S.C. § 103(a). The issue turns on whether the references disclose the limitations and features claimed.

Appellants contend, *inter alia*, that the references omit certain claimed limitations such as panning, tilting, and zooming functions being generated in a motionless image pickup device. Examiner contends that the references taken together teach the invention.

## FINDINGS OF FACT

Group I: Findings with respect to the rejection of claims 1 to 8 and 10 to 24 under 35 U.S.C. § 103(a).

1. Appellants have invented a method and apparatus for video conferencing in which a speaker at a conference is automatically located by processing both the audio and the video signals. Once located, the camera can center on the speaker by electronically panning, tilting, and zooming the image. (Specification 1). The claims are directed in part to a “stationary image pickup device, remaining motionless during operation, for generating image signals...”; an “audio pickup device”; and “means for processing said image signals and said audio signals to determine a direction of the audio source ...the determination depending at least at times on the image signal”. (Claim 1).
2. The Examiner has rejected the claims over Potts, in view of other references. Potts, in Figure 3 and on page 14, teaches a

video conferencing system using a camera #14, a plurality of microphones, #12, respectively feeding an audio based locator #70 and a video based locator #60, supplying signals to a camera control module #80 with “camera positioning directives” to direct the camera #14 at the speaker using camera control module #80. Potts indicates “These directives can be partly based on face detection and location analysis performed by a video based locator (or video based detector module) 60”. (Potts 16). The various modules, including the camera positioning device, are described as being electronic components. (Potts 13 top). By use of the audio and video modules, the location of the speaker is detected. (Potts 14). The adjustments, based first on the audio and then refined by video location signals, to the camera positioning device result in the device presenting a revised (refined) image of the speaker centered on him or her. (Potts 14 bottom).

3. The Examiner indicates that the Potts reference does not disclose a stationary image pickup device (camera #14). (Answer 8). Malkin teaches, in the context of camera/microphone devices for video conferencing, the improvement of a stationary camera using electronic pan, tilt, and zoom (EPTZ) instead of the older mechanical pan, tilt, and zoom (MPTZ) in which the camera physically moves through these operations. (Malkin, col. 1 top). Baker, in the same video conferencing context (col. 1, l. 10 *ff*), likewise teaches using EPTZ (col. 16, l. 12). Presuming that Potts does only teach a

MPTZ camera positioning system in a multi-modal location system, the Malkin and Baker references indicate an improvement of such a system to EPTZ in the context of a video conferencing device.

4. Appellants question why the Examiner cited Malkin or Baker with respect to Claims 1 and 10. (Reply Br. 6). We find that the Examiner has answered Appellants' question rather well, as those references teach the claimed limitation of a stationary video camera in the context of video conferencing. (Answer 9, middle).
5. Appellants' arguments concerning the "back and forth approach" (Reply Br. 8) should be related to claim limitations. Claim limitations have been addressed by the Examiner (Answer 10 bottom, 11).

Group II: Findings with respect to the rejection of claims 9 and 25 under 35 U.S.C. § 103(a).

6. Potts, in Figure 3, does show three microphones while claims 9 and 25 call for two microphones. A careful reading of Potts reveals his teaching of acoustic location of a speaker in a video conference situation with as few as two microphones. (Potts 35, top). Nevertheless, the Examiner has chosen to supplement her rejection of these claims with the teaching of Chu to show the use of two microphones in the context of video conferencing. (Chu, Abstract, and col. 2, 1. 60).

## PRINCIPLES OF LAW

On appeal, Appellants bear the burden of showing that the Examiner has not established a legally sufficient basis for the rejection of the claims.

In sustaining a multiple reference rejection under 35 U.S.C. § 103(a), the Board may rely on one reference alone without designating it as a new ground of rejection. *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961); *In re Boyer*, 363 F.2d 455, 458 n.2, 150 USPQ 441, 444 n.2 (CCPA 1966).

We note our reviewing court has recently reaffirmed that:

an implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the ‘improvement’ is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient ... In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him *capable* of combining the prior art references.

*DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368, 80 USPQ2d 1641, 1651 (Fed. Cir. 2006) (emphasis in original).

Our reviewing court states in *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) that “claims must be interpreted as broadly as their terms reasonably allow.” Our reviewing court further states that “the words of a claim ‘are generally given their ordinary and customary

Appeal 2007-0762  
Application 09/822,121

meaning." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005) (en banc) (internal citations omitted). The "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313, 75 USPQ2d at 1326.

With regard to the issue of whether it is obvious to use a more modern technology in substitution for an older one, we take guidance from the recent *Leapfrog Enterprises, Inc v. Fisher Price, Inc. and Mattel, Inc.*:

“Thus we bear in mind that the goal of the clam 25 device was to allow a child to press a switch associated with a single letter in a word and hear the sound of the letter as it is used in that word. ... Accommodating a prior art mechanical device that accomplishes that goal to modern electronics would have been reasonably obvious to one of ordinary skill in designing children’s learning devices. Applying modern electronics to older mechanical devices has been commonplace in recent years.” *Leapfrog Enterprises, Inc v. Fisher Price, Inc. and Mattel, Inc.*, --- F.3d ----, 2007 WL 1345333, C.A.Fed. (Del.), May 09, 2007 (No. 06-1402.)

## ANALYSIS

Appellants contend that Examiner erred in rejecting claims 1 to 25 under 35 U.S.C. § 103(a). Reviewing the findings of facts cited above, and omitting contentions concerning the expression of the rejection which are not appealable, we proceed as follows.

Appellants argue that the Baker reference has been dropped in the cited rejections. (Br. 12, footnote). We do not find this supported in the record, as the rejections quoted in the Brief and Answer clearly rely on the Baker reference, *inter alia*.

Appeal 2007-0762  
Application 09/822,121

Appellants contend that the “Examiner has failed to indicate any reference that teaches or suggests pan, tilt, zoom functions being generated in a motionless image pickup device.” (Br. 12). (See Findings of Fact 2, 3, and 4 above). We disagree with this contention, based on the cited Findings.

Appellants contend that the Examiner used impermissible hindsight in combining the EPTZ of Baker and Malkin with the multi-modal integration. Reviewing Finding of Fact #3 above, we find the genesis of the combination in the references themselves, especially in view of the *Leapfrog* decision concerning substituting more modern technologies in a base reference. Appellants have substituted the newer electronic EPTZ for the older mechanical MPTZ.

With respect to claims 9 and 25, while the Potts/Malkin references alone may have sufficed in this rejection (see the *Bush* and *Boyer* cites above, and Finding of Fact #6), it is no error to provide an extra teaching of two microphones, as demonstrated in the cited Chu reference.

#### CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1 to 25 as recited above. The rejection of those claims is affirmed.

#### DECISION

The Examiner's rejection of claims 1 to 8 and 10 to 24 under 35 U.S.C. § 103(a) for being obvious over Potts in view of Baker or Malkin is affirmed.

Appeal 2007-0762  
Application 09/822,121

The Examiner's rejection of claims 9 and 25 under 35 U.S.C. 103(a) for being obvious over Potts in view of Baker or Malkin and further in view of Chu is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

Appeal 2007-0762  
Application 09/822,121

AFFIRMED

eld

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF, MANOR NY 10510