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D E C I S I O N
of 18 May 2005

Case Number: T 0403/02 - 3.5.3

Application Number: 99202661.7

Publication Number: 0955765

IPC: H04M 3/56

Language of the proceedings: EN

Title of invention:
Teleconferencing system

Applicant:
Collaboration Properties, Inc.

Opponent:
-

Headword:
Teleconferencing system/COLLABORATION PROPERTIES

Relevant legal provisions:
EPC Art. 52(1), 56, 111(1)

Keyword:
"Change of issues - remittal for further prosecution"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0403/02 - 3.5.3

D E C I S I O N
of the Technical Board of Appeal 3.5.3
of 18 May 2005

Appellant: Collaboration Properties, Inc.
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 26 October 2001 refusing European application No. 99202661.7 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: A. S. Clelland
Members: D. H. Rees
R. T. Menapace

Summary of Facts and Submissions

I. This is an appeal from the decision of the examining division to refuse the European patent application number 99 202 661.7, with publication number 0 955 765, a divisional application of European patent application 94 921 163.5, with publication number 0 721 725. The decision was announced in oral proceedings held on 10 October 2001 and written reasons were dispatched on 26 October 2001. The reason given for refusing the application was that the claimed subject-matter of the main as well as of first and second auxiliary requests did not involve an inventive step with respect to the disclosure of document

D3: H.M. Vin et al., "Multimedia Conferencing in the Etherphone Environment," Computer, October 1991, IEEE, Los Alamitos, CA, US, pages 69 to 79,

in combination with the common general knowledge of the skilled person. Third and fourth auxiliary requests were found to contain subject-matter which extended beyond the content of the application as filed.

II. The following further documents are relevant to the present decision:

D1: C. Weiss, "Desk Top Video Conferencing - an Important Feature of Future Visual Communications," IEEE International Conference on Communications ICC '90, 15-19 April 1990, Conference Record, vol. 1, pages 134 to 139,

D4: J. Anderson et al., "Codec squeezes color teleconferencing through digital telephone lines," Electronics International, vol. 57(1984), Jan., no. 2, New York, USA, pages 113 to 115, and

D6: Press release of the International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11 N0389, 2 April 1993.

III. Notice of appeal was filed and the fee paid on 21 December 2001. Claim sets of a main and two auxiliary requests were submitted with a statement setting out the grounds of appeal on 26 February 2002. Claim 1 of the main request corresponded to that of the first auxiliary request in the decision of the first instance.

IV. In a preliminary communication annexed to a summons to attend oral proceedings the board questioned whether the independent claims of all the requests could be considered clear and whether they added subject-matter to the application as filed. Further, the claimed subject-matter of all the requests appeared on the basis of a preliminary analysis to lack an inventive step with respect to the disclosure of D3 and D1 and the common general knowledge of the skilled person as illustrated by D6, which was annexed to the communication.

V. In preparation for the oral proceedings, the appellant added two new auxiliary requests and submitted further arguments. A further amendment of the claimed subject-matter, which would apply to all of the requests, was offered on an auxiliary basis.

VI. At the oral proceedings the appellant amended claim 1 of the first auxiliary request and, as a result of the discussion, claim 1 of the main request. It was also made clear that two statements in the written proceedings had been made in error, and were withdrawn. The first was the assertion that the "appropriate transceivers" referred to in paragraph 0028 of the published application had been developed by the appellant for the teleconferencing system (submission of 18 April 2005, page 4, lines 19 to 26). Available transceivers had in fact simply been procured. The second statement withdrawn was the assertion that MPEG-1 and MPEG-2 have not "to this day" been used for real-time video compression in a commercial product (same submission, page 3, lines 34 and 35).

VII. At the oral proceedings the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 11 submitted as main request in the oral proceedings. At the end of the oral proceedings the chairman announced the board's decision.

VIII. The single independent claim 1 of the main request reads as follows:

"A teleconferencing system for conducting a teleconference among a plurality of participants comprising:

(a) a plurality of workstations (12), each including:

(i) associated monitors (200) for displaying visual images, and

(ii) associated audio and video (AV) capture (500, 600) and reproduction (200, 700)

capabilities for capturing and reproducing participant audio and video images of the participants;

(b) an analog audio and video (AV) signal path (13b, 14) for carrying audio and video signals, representing participant audio and video images, among the workstations (12), at least part of the AV path (13b) being implemented with unshielded twisted pair wiring; and

(c) a video mosaic generator (36), in communication with the AV path (13b, 14), for combining captured video images of at least a first and a second participant into a video mosaic image for reproduction at at least one workstation (12), wherein a full-screen video image of at least the second participant is carried on the AV path (13b, 14) at full motion color TV quality such that when reproduced the video image is perceived by a viewer as equivalent to one at NTSC quality."

Reasons for the Decision

1. *Admissibility of the amendments*

1.1 Claim 1 of the main request corresponds substantively to claim 1 as filed, with "an audio and video (AV)" in feature (b) replaced by "an analog audio and video (AV)", and the addition of "wherein a full-screen video image of at least the second participant is carried on the AV path (13b, 14) at full motion color TV quality such that when reproduced the video image is perceived by a viewer as equivalent to one at NTSC quality," at the end of the claim. That the audio and video path is

analogue, introduced in response to an objection by the board that the application did not, according to the appellant's own arguments, enable a digital implementation at the priority date, is clearly disclosed at paragraph 0027 of the published application. The final form of the second amendment was also introduced in response to an objection by the board, namely that the previous formulations left open the display size of the image of the second participant and therefore had no limiting effect on the bandwidth requirement of the AV path. That the displayed image may have the quality of an NTSC image is disclosed at paragraph 0025, and that the AV path must be capable of carrying at least close to a full motion NTSC-standard image is clearly implied by the requirement for the system to display a nearly full-screen image of a remote participant as disclosed at e.g. paragraph 0110 and shown in Figure 8A. It is further clear from paragraph 0025 that there is no requirement to reproduce an NTSC signal as such, only the quality is significant ("at standard NTSC-quality TV performance"). Hence the requirement for an image "equivalent to one at NTSC quality" is also disclosed in the application as filed.

The board concludes that the subject-matter of claim 1 of the main request was disclosed in the application as filed.

1.2 The dependent claims and description remain substantively as originally filed, with the exception of claim 2. Originally it was specified that "a participant can select the image of one of the participants in the mosaic image and, thereby, replace

the mosaic image with the image of the selected image." The present version adds that "the video mosaic generator is adapted to allow" this. Since it is disclosed that the mosaic generator reduces the resolutions of individual images in order to form a multiple image mosaic (paragraph 0054), and since a single image is required to be displayed at full resolution, it is clear that the mosaic generator must treat the two cases differently, and therefore "be adapted to allow" the display of a single participant image.

1.3 Hence the board concludes that the claims of the main request satisfy the requirements of Article 123(2) EPC.

2. *Clarity*

2.1 The examining division did not raise any objections under Article 84 EPC and the board also considers that the claimed subject-matter is clear in general. However, in its preliminary opinion the board raised the question whether "full motion color TV quality such that the video image is perceived by a viewer as equivalent to one at NTSC quality" clearly defined the matter for which protection was sought. The question remains relevant since the current formulation would also require a determination of whether an image is considered to be equivalent to NTSC or not. However, on reflection the board concludes that it would be within the abilities of the skilled addressee for example to devise and carry out statistical tests to determine whether an average viewer could distinguish between the quality of a genuine NTSC image and that of an image produced otherwise according to the claimed invention.

2.2 The appellant acknowledged in the oral proceedings that minor amendments would probably need to be made to the description in order, for example, to remove inconsistencies between what is claimed and what is said to be the invention in the description. The board concurs.

3. *Novelty and inventive step*

3.1 The examining division considered that D3 was the document disclosing the closest prior art. It identified two differences between the then claimed subject-matter and the disclosure of D3, namely that the video image was reproduced at TV quality (NTSC in the first auxiliary request) and that at least part of the AV path was implemented with unshielded twisted pair wiring. The examining division asserted that "The transmission of audio visual data over a twisted pair is nothing surprising," (decision to refuse, Point 3) and "The transmission of NTSC quality video over unshielded twisted pair wiring does not require any special measures since unshielded twisted pair wiring accommodates sufficient bandwidth," (Point 6).

3.2 The appellant has argued that it would have been surprising to the skilled person that it was possible to transmit analogue NTSC quality signals on unshielded twisted pair (UTP) wiring. While the appellant has not presented any actual evidence of a prejudice against using UTP wiring for analogue transmission of NTSC-quality audio and video, the board notes that the documents currently at its disposal and the argumentation of the examining division reflect an

assumption that the video data would be transmitted in a digital form if UTP wiring were used.

3.3 The examining division noted that the bandwidth of wiring is determined by its physical characteristics and pointed to two passages in the application itself, at paragraphs 0027 and 0029. The first of these passages reads as follows:

"... Given the current state of networking technologies, it is useful (for the sake of maintaining quality and minimizing costs) to provide separate signal paths for real-time audio/video and classical asynchronous data communications (...). At the moment, analog methods for carrying real-time audio/video are preferred. In the future, digital methods may be used."

This passage does not refer to UTP wiring at all, and certainly does not rule out the possibility that it might be surprising that high-quality analogue TV signals could be carried on UTP.

The second passage does state that for the complete network, i.e. data and AV, it was preferred to use the "commonly installed 4-pair UTP telephone wires." While it is noteworthy that this passage does not actually state that it was surprising that such wiring sufficed for analogue transmission of AV signals, it also does not seem to the board to imply that such a use was necessarily known to the skilled person at the time.

3.4 The decision to refuse goes on immediately after these references to state the following:

"The LAN characteristics which were available at the date of the priority did allow the transmission of audio visual data at TV quality." Both the terms "LAN" and "data" suggest that the examining division was thinking of transmission of the AV signals in a digital, not analogue, form.

Again, immediately after this assertion, the decision states:

"Furthermore document D4 shows (see figure 1), the reproduction of a video image at TV quality as well as the transmission of data over digital telephone lines. The skilled person is aware that digital telephone lines in general use unshielded twisted pair wiring." This is quite clearly a reference to a digital implementation of the AV path. D4 is exclusively concerned with digital compression techniques.

3.5 In its preliminary opinion, the board also put forward a possible digital implementation of the AV path, using MPEG-2.

3.6 Such argumentation, however justified by the subject-matter previously claimed and the application's general emphasis on future possible digital implementations, is vitiated by the appellant's restriction of the claimed subject-matter to an analogue audio and visual path. Hence the newly submitted independent claim has significantly changed the issues for examination.

3.7 The appellant argues that although the means were available it would have been surprising to the skilled person that analogue audio and video signals of NTSC

full motion quality could be transmitted over UTP wiring. The prior art documents in the case indeed do not indicate that the skilled person would have known that this could be done. On the other hand, there was no reason for the search examiner in this application to look specifically for such a document; the particular combination of features has only now emerged as being an important consideration. It would appear appropriate therefore to remit the case to the examining division for further examination, including if necessary further search.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of the first instance for further prosecution on the basis of the claims according to the main request submitted in the course of the oral proceedings on 18 May 2005.

The Registrar: The Chairman:

D. Magliano A. S. Clelland