Internal distribution code:

(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 13 June 2014

Case Number: T 2342/09 - 3.5.04

Application Number: 99944322.9

Publication Number: 1042912

IPC: H04N5/445, H04N5/44, H04N17/04

Language of the proceedings: EN

Title of invention:
DEMONSTRATING AN EFFECT OF A SIGNAL-PROCESSING OPERATION BY A SIGNAL-PROCESSING DEVICE

Applicant:
TP Vision Holding B.V.

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - after amendment (yes)

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2342/09 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 13 June 2014

Appellant: (Applicant)	TP Vision Holding B.V. High Tech Campus 5 5656 AE Eindhoven (NL)
Representative:	Busch, Patrick TP Vision Europe B.V. Intellectual Property Department Prins Bernhardplein 200 - Floor 8 1097 JB Amsterdam (NL)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 27 July 2009 refusing European patent application No.99944322.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman C. Kunzelmann
Members: A. Dumont
C. Vallet

Summary of Facts and Submissions

I. The applicant appealed against the decision refusing European patent application No. 99944322.9. The examining division had decided that the subject-matter of independent claims 1 and 10 of the requests admitted into the examination proceedings lacked an inventive step over the disclosure of prior-art document:

D3: EP 0 417 728 A2.

The following prior-art documents were also referred to in the decision:

D1: US 5 654 751 and
D2: US 5 499 019.

II. In an annex to the summons to oral proceedings, the board expressed doubts as to whether the subject-matter of claim 1 of the main request and the first auxiliary request was novel over the device known from D3 and whether the subject-matter of claim 1 of the second auxiliary request involved an inventive step, also in view of D2. The board further raised the question of whether dependent claim 6 of all requests then on file introduced added subject-matter (Article 123(2) EPC) in combining a presentation in a split-screen form as set out in claim 6 with a temporal activation/deactivation of the demonstration as set out in claim 1.

III. In the oral proceedings, the appellant filed a new (sole) main request (claims 1 to 8) and requested that the decision under appeal be set aside and that a patent be granted on the basis of that main request.

IV. Independent claims 1 and 8 read as follows:

"1. A device for demonstrating an effect of a selected signal-processing operation, said device comprising:

a signal-processing device for processing an incoming signal to supply a processed signal to presentation means, wherein the incoming signal is a video signal and said presentation means comprise a display screen; and
demonstration means for controlling the signal-processing device to perform said selected signal-processing operation in response to a user command,

characterized in that the demonstration means further comprise:

storage means for storing a demonstration signal selected to allow an effective demonstration of the particular processing operation, wherein the storage means are adapted to contain a static picture, and directing means for directing the demonstration signal to the signal-processing device in response to said user command,
the demonstration means being further adapted to activate and deactivate said processing operation alternately during the presentation of the demonstration signal or to present the demonstration signal in a split-screen form, one part of the display screen showing a presentation of the demonstration signal having said processing operation activated and another part of the display screen showing a presentation of the demonstration signal having said processing operation deactivated."

"8. A method of demonstrating an effect of a selected signal-processing operation, the method comprising the steps of:

processing an incoming signal to supply a processed signal to presentation means, wherein the incoming signal is a video signal and said presentation means comprise a display screen; and
controlling said selected signal-processing operation to be performed in response to a user command,

characterized in that the method comprises the steps of:

reading a demonstration signal from storage means, wherein the storage means are adapted to contain a static picture, which demonstration signal has been selected to allow an effective demonstration of said selected processing operation,
processing the demonstration signal in response to said user command, and
activating and deactivating said processing operation alternately during the presentation of the demonstration signal or presenting the demonstration signal in a split-screen form, one part of the display screen showing a presentation of the demonstration signal having said processing operation activated and another part of the display screen showing a presentation of the demonstration signal having said processing operation deactivated."

V. The reasoning in the impugned decision may be summarised as follows:

The subject-matter of the claims is novel and not obvious over D1 taken alone.

D3 discloses a device according to the preamble of claim 1, where the demonstration of a processing function can be interrupted. D3 does not mention storage means but some functions (videotext, picture-in-picture, ...) will require the use of memory storage for demonstration. A signal stored in memory for executing one of the functions has to be suited to the intended demonstration and thus constitutes "a demonstration signal selected to allow an effective demonstration of the particular processing". Furthermore, claim 1 does not indicate when the signal is stored (or pre-stored). Thus all the features of claim 1 follow in an obvious manner from the teaching of D3.

VI. The appellant’s arguments may be summarised as follows:

The closest prior art D3 neither discloses nor suggests a stored demonstration signal directed to the signal processing device in response to a user command. Storage means are inherently necessary for implementing a signal-processing function. The storage means store either an intermediate signal of the processing operation or the end result of the processing. However, the present invention requires the memory to further store and direct to the signal processor an unprocessed demonstration signal. Nowhere in D3 is it disclosed or even suggested that the signal directed to the signal processor is delivered by a storage medium, let alone that the applied signal is a demonstration signal.

The present invention triggers with a single user command the automatic selection and processing of a suitable demonstration signal and its presentation. There is indeed no point in demonstrating a signal-

processing operation on the basis of an unsuitable incoming television signal supplied to the device in D3. However, this does not render the present invention obvious. Nothing in D3 even remotely suggests a problem, a disadvantage, or a desirable improvement associated with the incoming signal. The reasoning of the examining division was thus based on hindsight. The invention must be considered to already reside in recognising the problem and/or a desire for further improvement, i.e. performing the demonstration in a more efficient and controlled way. The solution then might be obvious once the problem is clearly stated.

The present invention is also not suggested in D1 or D2, which relate respectively to the remote fields of MPEG codec testing and of demonstrating fake messages in a pager.

Reasons for the Decision

1. The appeal is admissible.

2. Amendments

Device claim 1 combines the features of claims 1, 3, 6 and 7 as originally filed, whereby the features of claims 6 and 7 are recited as alternative ways of presenting the demonstration signal in the last paragraph of amended claim 1. These amendments do not specify a combination of a presentation in a split-screen form with a temporally alternating activation/deactivation of the signal-processing operation, which was objected to under Article 123(2) EPC by the board in the annex to the summons to oral proceedings.

Corresponding amendments are included in independent method claim 8.

Dependent claims 2 to 7 respectively correspond to claims 2, 4, 5, 8, 9 and 10 as originally filed.

In conclusion, the amended claims comply with Article 123(2) EPC.

3. Patentability

3.1 It is uncontested that D3 represents the closest prior art. D3 discloses a device (television set or VCR) according to the preamble of claim 1. The device is adapted to demonstrate the effect of signal-processing operations (for instance picture-in-picture, noise reduction ...) in a sale point, without having to modify an off-the-shelf device ("keinerlei kostenerhöhenden Extraaufwendungen" in column 2, lines 8 and 9). Thus the board understands D3 as disclosing a device with signal-processing operations performed on the same incoming signal in normal operation and in the demonstration mode.

3.2 In contrast thereto, claim 1 sets out that the demonstration signal consists of (at least) one static picture, whereas the incoming signal used in normal operation is a video signal. Claim 1 further makes clear that the stored demonstration signal is directed to the signal-processing device during a demonstration (instead of the incoming signal). These differences render the subject-matter of claim 1 novel over D3 (Article 54 EPC 1973).

3.3 In order to arrive at the present invention starting from D3, the skilled person would have to recognise

that the incoming (video) signal might not be suitable to effectively demonstrate a particular signal-processing operation.

3.4 In D3, a sales person might notice that the content of currently presented video signal is not suitable for effective demonstration and for instance manually select another more suitable incoming signal before demonstrating a particular signal-processing operation (see also the description of the present application, page 1, lines 9 to 19). Although this is not mentioned, the board recognises that the device of D3 must incorporate memory means in order to process and represent the video signal, for instance for storing a picture-in-picture signal or videotext pages. However, those memory means are in the board's view different from the storage means of claim 1, which store a static picture as an unprocessed demonstration signal to be directed to the signal-processing device. Unlike in the prior art D3, the static picture, instead of the incoming video signal, is directed from the memory means to the signal-processing means to be subject in the demonstration mode to the same signal processing as an incoming video signal in normal operation.

In the absence of any hint to do so, modifying the off-the-shelf device of D3 by including storing means and directing means as specified in present claim 1 is not suggested in D3 taken alone.

3.5 D1 relates to visually testing the quality of an appropriate signal transmitted and submitted to different signal-processing operations (essentially MPEG encoding followed by decoding). A jig is used to visually test decoders on an MPEG test signal stored in a memory in response to a test start signal. D1

acknowledges the necessity to use a suitable signal optimised to test the capabilities of the signal-processing operation, i.e. MPEG decoding (see column 11, lines 8 to 27). D1 allows a visual comparison of the decoded signal with an original source signal to test the encoding and decoding quality. However, the field of codec testing of D1 is remote from the field of the present invention as set out in the first two lines of claim 1. As a result, the teaching of D1 does not render obvious modifying the device of D3 to demonstrate the effect of a user-selectable signal-processing operation typical for such a device, using a static picture.

3.6 D2 discloses a pager with a memory (130) for storing demonstration static images to be supplied to a CPU device (115) and displayed in sequence in a demonstration mode, instead of a usual incoming paging signal received by circuit (110) (see Figure 1 and column 2, line 59 to column 3, line 13). However, demonstration images are "fake" messages not subject to signal processing prior to presentation, unlike normal incoming paging messages. Furthermore, D2 belongs to the remote field of pagers intermittently receiving messages, so that its teaching does not render obvious modifying the television set or VCR of D3 to demonstrate a user-selectable signal-processing operation typical for such a device.

3.7 In conclusion, modifying the device of D3 so as to arrive at the invention would not be obvious. Thus the subject-matter of claim 1 involves an inventive step (Article 56 EPC 1973).

3.8 The same applies by analogy to independent method claim 8, which includes corresponding method steps

("demonstrating an effect of a selected signal-processing operation", "reading a demonstration signal from storage means", "static picture", "processing the demonstration signal").

4. It follows that the set of claims 1 to 8 filed during the oral proceedings before the board fulfils the requirements of the EPC discussed in the present appeal proceedings. Moreover, the board sees no reason which would prejudice the grant of a patent on the basis of the present set of claims, the figure as originally filed and a description to be adapted.

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 first instance with the order to grant a patent on the basis of the set of claims (1 to 8) filed during the oral proceedings, the figure as originally filed and a description to be adapted.

The Registrar: The Chairman:

K. Boelicke C. Kunzelmann

Decision electronically authenticated