

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board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. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHELE M. COVELL,
and M. MARGARET WITHGOTT

Appeal No. 2000-2102
Application 08/771,947

ON BRIEF

Before RUGGIERO, LALL and BARRY, Administrative Patent Judges.

LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 21-27, 30-36, 38, 39, 41, 43, 46-52, 54 and 55, the only pending claims in the application.

The disclosed invention is directed to the selective recording of information streams. An example of such an information stream is a video signal received via a television broadcast medium. The invention can be employed to selectively

control a VCR or similar type of video recording device based on the content of the incoming video signal to cause it to record only that information that is desired by the end user. The selective control of the information recording device is carried out by memorizing one or more segments of information and thereafter comparing the contents of an incoming information stream to the memorized segments. If a match is found between the incoming information and a memorized segment, the recording device is controlled to perform a desired operation. The selective recording technique of the invention can be employed in one or two different modes. In one mode, identified as "surfing" in the disclosure, the recording device is activated to record information of interest to the end user. For instance, if the user has favorite programs that are to be recorded on a regular basis, such as a daily soap opera or a talk show, the present invention can be employed to control the recording device to record that program any time that it is broadcast over any of the channels that can be received at the user's premises. In an alternative mode of operation, identified as the "zapping" mode, the present invention can be employed to inhibit the recording of undesirable material, such as advertisements, news updates, or

the like. In this mode, while the VCR is operating to record a program of interest, the invention determines if a previously designated advertisement or the like is incoming, and if so causes the VCR to stop the recording of that advertisement and rewinds the VCR to the point at which the advertisement began. Once the advertisement has concluded, the VCR is activated, to resume the recording of the desired program. A further understanding of the invention can be achieved from the following claim.

Claim 21 is illustrative of the claimed subject matter and reads as follows.

21. A system for controlling a recording device to effect selective recording of an incoming information stream having a sequentially ordered plurality of information frames, the system comprising:

a memory for storing a statistical representation of at least one memorized information segment, each of said segments having a plurality of information frames; and

control logic in communication with the memory for performing sequential pattern matching by comparing a statistical characterization of at least two of the plurality of incoming information frames to sequences of information frames in said memorized information segment, modifying at least one memorized information segment based on the sequential pattern matching, and generating a signal for the recording device to effect selective recording of the incoming information stream based on the sequential pattern matching.

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The examiner relies on the following references:

Takahama	5,253,061	Oct. 12, 1993
Ellis et al. (Ellis)	5,436,653	July 25, 1995

Claims 21-27, 30-36, 38, 39, 41, 43, 46-52, 54 and 55 stand rejected under 35 U.S.C. § 103 as being unpatentable over Takahama in view of Ellis.

Rather than repeat the arguments of appellants and the examiner, we make reference to the brief (Paper No. 24 filed on November 1, 1999) and the answer (Paper No. 26) for the respective details thereof.

OPINION

We have considered the rejections advanced by the examiner and the supporting arguments. We have, likewise, reviewed the appellants' arguments set forth in the brief.

We affirm-in-part.

In our analysis, we are guided by the general proposition that in an appeal involving a rejection under 35 U.S.C. § 103, an examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on

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the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); 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). We are further guided by the precedent of our reviewing court that the limitations from the disclosure are not to be imported into the claims. In re Lundberg, 244 F.2d 543, 113 USPQ 530 (CCPA 1957); In re Queener, 796 F.2d 461, 230 USPQ 438 (Fed. Cir. 1986). We also note that the arguments not made separately for any individual claim or claims are considered waived. See 37 CFR § 1.192(a) and (c). In re Baxter Travenol Labs., 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) ("It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for nonobviousness distinctions over the prior art."); In re Wiechert, 370 F.2d 927, 936, 152 USPQ 247, 254 (CCPA 1967) ("This court has uniformly followed the sound rule that an issue raised below which is not argued in that court, even of it has been properly brought here by reason of appeal is regarded as

abandoned and will not be considered. It is our function as a court to decide disputed issues, not to create them.").

In response to the rejection of the claims on appeal (answer at pages 3-6), appellants argue (brief at pages 6-8) that there is no motivation to combine the teachings of Takahama and Ellis. Appellants argue that the Takahama patent is directed to a system for automatically controlling a video tape recorder, or the like, to record desired programs; in contrast, the Ellis patent is directed to a system for recognizing and verifying certain broadcast segments, particularly commercials. The appellants conclude (id. at 8) that "in view of the distinctly different objectives to which the patents [Takahama and Ellis] are directed, it would not be obvious to apply the teachings of the Ellis patent to the system of the Takahama patent, since doing so would defeat the objectives of the Takahama patent." The examiner responds (answer at page 7) that "appellant submits that the Ellis patent is directed to recognition of a particular segment, such as a commercial. In the same field of endeavor, Takahama et al. also discloses a similar invention that is applicable to television program detection in order to cancel an unnecessary commercial program." The examiner concludes (id.) that "the combination of Takahama et al and Ellis taken as a

whole would have been obvious...." We agree with the examiner's rationale for making the combination. Moreover, we find that the Takahama patent does disclose the need and the means for pattern matching of the incoming segments of information with the memorized segments in order to detect the incoming commercials, for instance. The Ellis patent extends the same method of recognizing the pattern of the incoming broadcast information with memorized segments of information. Therefore, we find that the Ellis patent is suggestive of using a more sophisticated method and means of pattern matching for the same problem of pattern matching in the Takahama patent. Therefore, we are of the opinion that the combination suggested by the examiner of Takahama and Ellis patent is justified.

Next, appellants argue (brief, pages 8-13) that even if the teachings of the Takahama patent and the Ellis patent could be combined the combination would not suggest the claimed subject matter. Appellants argue the various claims in seven pairs as below.

1. Claims 21 and 38

Appellants argue (brief at page 9) that "[n]either of the Takahama nor Ellis patents discloses, nor otherwise suggests, the concept of modifying memorized information segments on the basis

of the comparison between incoming and stored information frames. Rather, once the relevant information is first stored in a memory, it remains fixed. There is simply no reason to modify the stored data in the systems of either of those patents." The examiner responds (answer at page 7) that "the selective recording system of Takahama et al discloses the well known application of commercial cancelation (e.g., col. 5, lines 20-23) based on sequential pattern matching ... so as to modify at least one memorized information segment when commercial program images in memory 18 are continuously updated (Fig. 2, elements 14, 19, 20, 26)." We agree with the examiner's position that Takahama does show a continuous updating of the memorized images in memory 18 as a result of inputs to it from elements 26, 19, 16, 17, and 20 (see also column 5, lines 20-23). Therefore, we sustain the obviousness rejection of claims 21 and 38 over Takahama and Ellis.

II. Claims 23 and 43

Appellants argue (brief at page 10) that neither Takahama nor Ellis, singly or together, show the retaining of the segments in the memory "based on a predetermined number of successful matches," nor further disclose "removing stored information, particularly on the basis of whether a successful match occurs."

In response, the examiner points to Takahama, Fig. 2, elements 22-26, and Ellis at column 30, line 36-column 31, lines 36 and Fig. 9. (answer at page 8). The examiner also points to Fig. 3, element 30, of Ellis for the deletion of one or more frames in a memorized segment based on the pattern matching process, and further to Ellis at column 28, lines 66-column 29, line 53 and column 42, line 45-column 44, line 2 for the associated text (answer at page 9). We agree with the examiner's position. Takahama does show the addition of the frames to memory 18 depending upon the successful matching of the incoming information with the memorized segments, and Ellis shows the concept of deleting the frames from the memory based on the unsuccessful pattern matching of the memorized information with the incoming segments. Therefore, we sustain the obviousness rejection of claims 23 and 43 over Takahama and Ellis.

III. Claims 27 and 55

Appellants argue (brief at page 11) that "in the system of the Ellis patent, the results of the comparisons of preceding frames may be irrelevant. The only concern in that system is whether the eight key signatures for a stored segment can be found in an incoming segment. Comparisons made with non-matching frames do not have any impact on the process." In response

(answer at page 8), the examiner asserts that "Figure 3 of Ellis illustrates ... the same comparison technique, wherein the input frames are compared [in element] 420 based on information (e.g. the corresponding error count) generated by comparing each of the previous frames (see col. 11, lines 28-46 and feedback loops 404-406-408-420 and 404-414-422-404 in Fig. 3)." We are persuaded by the examiner's position. Ellis discloses a technique where the input frames are compared based on the information generated by comparing each of the previous frames as pointed out by the examiner. Therefore, we sustain the obviousness rejection of claims 27 and 55 over Takahama and Ellis.

IV. Claims 33 and 46

Appellants argue (brief at page 11) that "if a successful comparison occurs, which includes the beginning or ending portion of the memorized segment, at least one frame is added to the beginning or ending portion, as appropriate. Neither of the Ellis nor Takahama patents discloses this concept of adding one or more frames to a stored information segment based on a successful comparison which includes the terminal frame of a stored segment." The examiner responds (answer at page 8) that "Takahama et al disclose such concept that the memorized segment

18 is modified by continuously adding incoming information frames 10 to the memorized segment 18 based on a successful comparison (22-26) between a portion of the incoming information stream 10 and a portion of the memorized segment (e.g. Fig. 7)." We agree with the examiner's position. Moreover, we note that the appellants' argument is not commensurate with the recited limitations of claim 33. In addition, we are of the view that any segment of information is inherently going to have a terminal frame associated with it. Therefore, the segment of information memorized in Takahama or in Ellis would have a terminal frame associated with that segment. Therefore, we sustain the rejection of claims 33 and 46.

V. Claims 34 and 47

Appellants argue (brief at page 12) that "in accordance with the procedure of claims 34 and 47, therefore, these non-matching frames are deleted, so that only the portions of the memorized and incoming segments which match are retained in the memory. Again, the cited references do not disclose this concept" The examiner responds (brief at page 9) that "Fig. 3, element 30, of Ellis et al teaches such well known concept based upon a successful comparison (i.e., acceptable) between one portion of the incoming information frame and the memorized segment (e.g.

database 412) and an unsuccessful comparison (i.e. unacceptable) between a second portion of the incoming information stream and the memorized segment" We note that the appellants' argument is merely conclusory. Moreover, we are persuaded by the examiner's response that Ellis does show the recited limitations of claim 34.

VI. Claims 35 and 48

Appellants make a merely conclusory statement (brief at page 12) that "[c]laim 35 comprises a combination of the features recited in each of claims 33 and 34, namely the modification of the memorized segment by adding and deleting frames." The examiner responds (answer at page 9) that "since the subject matter of claims 33 and 34 are fully disclosed by the references, the combination of these features are likewise disclosed" For the rationale presented above regarding claims 33 and 34, we sustain the rejection of claims 35 and 48 over Takahama and Ellis.

VII. Claims 36 and 49

After the review of the appellants' argument (brief at page 13) and the examiner's response (answer at page 9), we are of the view that claim 36 is directed to a particular type of data structure as to how the frames of data are arranged in the

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memory. We find that the examiner has not made a prima facie case of meeting the recited limitation of claim 36 (i.e. "control logic for marking a frame adjacent to a frame to be deleted from a memorized segment as a known boundary of the segment; and control logic for preventing the addition of information frames to a terminal portion of a memorized segment which has been marked as a known boundary point."). The examiner's mere assertion that Takahama and Ellis teach the concept of appending newly matched segments to the end of data base 412 [fig. 3 of Ellis] is not sufficient to disclose or teach the particular data structure claimed in these claims. Therefore, we do not sustain the obviousness rejection of claims 36 and 49 over Takahama and Ellis.

In conclusion, we have sustained the obviousness rejection of claims 21-27, 30-35, 38, 39, 41, 43, 46-48, 50-52, 54 and 55; however, we have not sustained the obviousness rejection of claims 36 and 49.

The decision of the examiner is affirmed-in-part.

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

AFFIRMED-IN-PART

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