

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOICHI TAKAGI,
HIROSHI SUZUKI, KUNIZO SAKAI,
YOSHIKI KOBAYASHI and
TAKESHI SAITO

Appeal No. 2002-1940
Application 08/932,649

ON BRIEF

Before THOMAS, HAIRSTON and GROSS, Administrative Patent Judges.
THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1-3, 15, 16, 24 and 25. Representative claim 1 is reproduced below:

1. An intruder monitoring apparatus monitoring a wide are by changing a camera shooting direction comprising:

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Claims 1-3, 15, 16, 24 and 25 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Aviv in view of Kuo.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief of the appellants, and the examiner's statement of the rejection of the claims on appeal in the Office action, Paper No. 16, mailed on February 2, 2001 (answer, page 3), as well as the responsive arguments in the answer.

OPINION

For the reasons set forth by the examiner in the above-noted Office action and answer, we sustain the rejection of all claims on appeal under 35 U.S.C. § 103.

Although page 3 of the principal brief on appeal effectively groups independent claims 1, 15, 16 and 24 together, the effective arguments are presented in the succeeding pages of the brief as to independent claims 1 and 15. Method independent claim 16 corresponds to apparatus independent claim 1 and method independent claim 24 corresponds to apparatus independent claim 15. Separate arguments are presented as to dependent claims 2, 3 and 25.

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At the outset, we observe that the means for managing clause of representative claim 1 on appeal relates only to at least one of a plurality of types of information selected from a Markush Group of three items, the video device control information used for controlling the video devices, object characteristic quantity information relating to the characteristic quantities of the object itself and the topographic information of the area to be monitored. Thus, as to this aspect of claim 1 on appeal, the examiner's duty is to find teachings or suggestions in the applied prior art only to at least one of these three alternatives. Having said this, there appears to us to be no dispute between the appellants and the examiner as to these three features, namely, that there appears to be agreement that Aviv teaches effectively managing video device control information used for controlling the video devices and object characteristic quantity information relating to the characteristic quantities of the objects in Aviv. Correspondingly, there is an agreement between appellants and the examiner that this reference does not teach topographic information of the area to be monitored. Our study of this reference concludes the same. Note the discussion of Aviv in the principal brief on appeal at pages 3 and 4.

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Likewise, there appears to be no dispute between the examiner and the appellants regarding the initially recited features of a monitoring camera capable of changing shooting direction, an image processor for analyzing and a video device controller for controlling the video devices as recited early in independent claim 1 on appeal. It appears to us that the examiner has well-correlated the nature of the subject matter in these portions of the claim at pages 2 and 3 of the Office action in the statement of the rejection on February 2, 2001.

Independent claim 1 consistently utilizes the terminology "characteristic quantities" to describe only the characteristic quantities of an object and not any characteristic quantities of any topographic information, for example. The means for teaching feature is focused upon teaching the image processor characteristic quantities of the object. This clearly corresponds to the ability of Aviv's system to have stored within its system known characteristic movements of individuals as set forth in the Abstract which serves as the basis of the comparison operation for dynamically derived information with respect to "signature" video signals stored in memory 16 as in Figure 1 of Aviv. This is discussed principally at columns 7 and 8 of this reference.

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Before we discuss the means for correcting and renewing feature of claim 1 on appeal, this correcting and renewing is disclosed as an object of the invention at specification page 3, line 27 through page 4, line 5 and in detail in the Summary of the Invention at specification, page 5, line 24 through page 9, line 4. These portions of the Summary of the Invention make clear that the renewing, argued to a great extent in the brief and reply brief, is a simple adjustment, change, or correction or perhaps an updating capability of the object quantity information. In the context of Aviv, the teaching feature of the image processor as well as the means for correcting and renewing corresponds to the continued sampling and comparing operations with respect to the initial database of information stored about the objects discussed throughout Aviv.

On the other hand, as appellants rightly argue, and the examiner correctly admits, there is no topographic store in Aviv and therefore there can be no use in the correction and renewing phrase of any topographic information. All this has meaning as to the subject matter of claim 1 on appeal because the topographic information is recited to be stored in advance. It is also broadly "used" in the process of the means of correcting and renewing.

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As to these noted deficiencies in Aviv, the examiner presents Kuo as teaching the missing features in Aviv. The examiner expresses his rationale beginning at the bottom of page 3 as to the combinability and asserts that Kuo teaches the use of the determined prestored topographic information at various locations in that reference. It appears to us that the examiner's "use" analysis here is somewhat weakly based, but we agree with the rationale of the obviousness of incorporating the teachings of Kuo relating to topographic information into those of Aviv in order to evaluate the images and accurately change the camera shooting conditions in performing a tracking function as expressed in the sentence bridging pages 3 and 4 of the previously noted Office action.

However, we are persuaded by the examiner's rationale expressed at pages 7 and 8 of the answer setting forth more persuasively essentially three rationales for the motivation within the art for combining Kuo into Aviv. There the examiner makes reference to Aviv's teachings of multi camera environments at column 10 and the ability of Aviv's tracking to be able to take into account azimuth elevation information at column 5, lines 30-40. In a broader context, substantially all the

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discussion at Aviv's column 5 is persuasive as to this observation of the examiner. Further, the most persuasive rationale of the examiner appears to be based upon the examiner's discussion at the bottom of page 7 of the answer, where the examiner makes note of Aviv teaching various environments of use for his intruder analysis system. These include column 5, lines 55 to 63 as well as column 9, lines 35 through 47. Based upon our study of these portions, we agree with the examiner's rationale that these suitable applications of Aviv's teachings include the use of structures of a high vantage point such as a utility tower or traffic light support tower which would be high enough to where topographic data would be a consideration in a proper analysis of an accurate detection and surveillance system.

On the one hand, the artisan would have appreciated that there is an apparent flat plane perspective in the depiction of the image analysis operations in Figures 2 and 3 of Aviv, yet, on the other hand no provisions are made within Aviv to include an analysis from the higher perspectives of elevated camera locations when they are necessary or chosen for a particular elevated application noted earlier. Because Kuo's teachings relate specifically to topographic mapping operations, the

ability to fulfill the higher elevation teachings of Aviv would have been well appreciated by the artisan. Kuo's digital elevation information is stored in a database for later use (Figures 1, 9A, 9B).

Moreover, we observe that the topographic elevation capabilities in Kuo relate to features or objects that are derived from the particular viewing perspective. Kuo discusses in detail various point features or various image features throughout the reference, such as at column 6, lines 7-10; column 15, line 66 through column 16, line 5, and the need to cure the deficiency of the prior art discussed at column 2, lines 37-46 of identification of image features. These obviously would have corresponded to the objects or people in the context of the Aviv's teachings when considered together with this reference.

Taken in this light, it is apparent to us that the artisan would have found it obvious to have combined the teachings of Kuo into those of Aviv to further enhance the ability of Aviv's system to provide more valid and accurate elevated perspective information for his surveillance system. Indeed, one of the major aims of Kuo is to provide improved accuracy of digital elevation information as expressed in Kuo's Summary of the

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Invention, the discussion beginning at the bottom of column 13 and the additional embodiments discussion beginning with respective Figures 9-12 at the top of column 14 through the end of the patent. This conclusion is buttressed by Aviv's teaching at column 5, lines 33 through 36 that in a wide field-of-view operation objects are automatically tracked in azimuth and elevation. Additionally, the Figure 4 showing of Aviv indicates that in that embodiment, voice comparison information is also added to the basic embodiment shown in Figure 1 of his reference for further enhancement of that initial system. Therefore, in view of all these considerations and those expressed by the examiner in the analysis of the teachings and suggestions of both applied references, there exists compelling evidence of the obviousness of the subject matter of independent claim 1 on appeal and its corresponding method independent claim 16.

Turning now to broader apparatus independent claim 15 and its corresponding method independent claim 24, we agree with appellants' urging that the preamble of the claim effectively breathes life and meaning into the body of these broad claims. Because we have found the subject matter of independent claims 1 and 16 on appeal to have been obvious to the artisan in their

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more specific version, clearly the subject matter of very broad independent claims 15 and 24 would have been even more obvious to the artisan.

Finally, we are unpersuaded by appellants' arguments at page 9 of the principal brief on appeal as to dependent claims 2, 3 and 25. Appellants merely "submit" that the portions relied upon by the examiner do not contain the alleged teachings and provide no other detailed discussion other than this general urging of patentability. On the other hand, we are persuaded of the unpatentability of these claims by the examiner's discussion of them beginning at page 8 of the answer where the examiner goes into great detail corresponding the teachings of the references to the respective features claimed. We therefore sustain the rejection of dependent claims 2, 3 and 25. Appellants' general mention of these claims at page 3 of the reply brief is unpersuasive in countering the arguments of the examiner in the answer as to these claims as well.

In conclusion, we are unpersuaded by appellants' basic urgings in the brief and reply brief that there was no motivation for the artisan to have combined the teachings and suggestions of Kuo and Aviv and, even if the combination was proper, that the

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subject matter that is claimed would not have been met. As such, the decision of the examiner rejecting all claims on appeal under 35 U.S.C. § 103 is affirmed.

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

AFFIRMED

James D. Thomas)	
Administrative Patent Judge)	
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Kenneth W. Hairston)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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