

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CHANG HUNG-CHE and CHEN YEN-CHENG

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Appeal No. 1999-1115  
Application No. 08/821,217

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ON BRIEF

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Before KRASS, FLEMING, and BLANKENSHIP, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-9, all of the pending claims.

The invention is directed to an image reading head. More particularly, rather than mounting the driving motor on a fixed frame with the optical scanner mounted on a movable module, as was

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conventionally done, the instant invention improves upon the prior art by mounting the optical scanner and the driving motor integrally on a movable module to save space and cost.

Independent claim 1 is reproduced as follows:

1. An image head for scanning and sensing an image placed on a frame and a track in parallel to a direction of said scanning, comprising:  
a movable module, having an optical reader and a driving motor integrally mounted to conserve space and capable of sliding back and forth along said track; and  
a coupling to a fixture on said frame capable of receiving a force exerted by said movable module and causing said movable [sic] to react and to slide along said track.

The examiner relies on the following references:

Carbone	4,525,748	June 25, 1985
Hirano et al. (Hirano)	5,235,353	Aug. 10, 1993
Nishio et al. (Nishio)	5,669,048	Sep. 16, 1997

Claims 1-9 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Hirano and Carbone with regard to claims 1-5, 7 and 8, adding Nishio with regard to claims 6 and 9.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

#### OPINION

We affirm.

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At the outset, we note that, in accordance with appellants' grouping of the claims at page 2 of the principal brief, all claims will stand or fall together. Accordingly, we need to be concerned only with independent claim 1.

As the examiner has pointed out, Hirano discloses the subject matter of instant claim 1 (a movable module, a head and motor integrally mounted to conserve space and capable of sliding back and forth along a track, and the same type of rack and pinion structure to which the "coupling" language of claim 1 refers) but for the claimed "optical reader." Because Hirano is not concerned with an image head for scanning, but rather with a printing head, Hirano integrates a recording head 31 with motor 32 rather than an optical reader with the motor, as is presently claimed.

The examiner was cognizant of this difference and pointed to Carbone to provide for the deficiency of Hirano. Carbone discloses an optical reader for use in scanning images. While appellants may be correct in identifying the structure of Carbone as being analogous to the conventional scanner upon which they improve (where the driving motor is mounted on a fixed frame with the optical scanner mounted on a movable module), it is the teaching of Hirano which suggests an improvement whereby a head and motor may be mounted integrally on a movable module. The importance of Carbone's teaching with regard to the instant rejection is at column 1, lines 61-64, wherein it is stated:

The dot-matrix printer printhead can be removed and replaced by the optical sensor so that the printer is transformed into an image sensing device with the exclusive purpose of image scanning.

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Accordingly, Carbone provides an explicit teaching of substituting an optical sensor for a printhead in order to turn a printer into a scanner.

When this explicit teaching is viewed in light of Hirano's teaching of improving a printer by mounting a printhead and motor integrally on a movable module, the artisan would clearly have been led to substitute an optical reader for the ink jet recording head 31 in Hirano in order to optionally turn the printer of Hirano into a scanner.

Since the prior art suggests doing what instant claim 1 recites, we find the instant claimed subject matter to be unpatentable under 35 U.S.C. 103.

Appellants argue that a "reading head is different from a scanning head" and that the prior art recording head "is not relevant to the present invention" [principal brief-page 2]. However, as explained supra, the prior art explicitly suggests substituting an optical sensor for a printhead in order to turn a printer into a scanner.

Appellants also argue that Hirano "never hinted that mounting the motor on the moving module can save space" [principal brief-page 2]. We disagree. Clearly, compactness was a feature sought by Hirano. See column 1, lines 57-58 for example: "a recording apparatus for which the custody space during non-use can be made small."

To whatever extent appellants are attempting to make a "commercial success" argument at page 2 of the principal brief, in discussing an enclosed product brochure for an Avision scanner,

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the argument is not persuasive as appellants have not shown any nexus between whatever commercial success has been had and the specific claim language.

The examiner's decision rejecting claims 1-9 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

Errol A. Krass )  
Administrative Patent Judge )  
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) INTERFERENCES

Michael R. Fleming )  
Administrative Patent Judge )

Howard B. Blankenship )  
Administrative Patent Judge )

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