

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NOBUO HASHIMOTO, TORU ISHII, KENJI NAKAMURA,
TAKESHI OGOSHI, GEN SASAKI, and TAKESHI AOI

Appeal No. 1999-2019
Application No. 08/646,810

HEARD: APRIL 24, 2001

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

BLANKENSHIP, 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 1-11 and 13-48, which are all the claims remaining in the application.

We affirm-in-part.

BACKGROUND

The disclosed invention is directed to an image reader apparatus for optically reading information from photographic film and transferring the image information to an external apparatus, such as a computer. Representative claims 1 and 10 are reproduced below.

1. An image reader apparatus comprising:
 - an image pickup device which is controllably exposed to an object to produce an image signal of the object;
 - a mover which moves the object and the image pickup device relative to each other;
 - a storage operable to store an image signal;
 - a writing device which is operable to write an image signal in the storage;
 - a reading device which is operable to read an image signal from the storage;
 - a discriminator which discriminates whether one of the writing device and the reading device is in operation; and
 - a controller which controls the exposure of the image pickup device in accordance with a result of the discriminator.

10. An image reader apparatus comprising:
 - an image pickup device which is controllably exposed to an object to produce an image signal of the object;
 - a mover which moves the object and the image pickup device relative to each other;

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a storage operable to store an image signal;

a writing device which is operable to write an image signal in the storage;

a reading device which is operable to read an image signal from the storage;

a discriminator which discriminates whether a relative movement is executed between the object and the image pickup device; and

a controller which controls at least one of the writing and reading devices to perform at least one of writing and reading of image signal during a relative movement, wherein the image pickup device is exposed after a relative movement is completed.

The examiner relies on the following references:

Kojima	5,402,252	Mar. 28, 1995
Karasawa (Japanese Examined Patent Publication) ¹	4-28187	May 13, 1992

Claims 1-11 and 13-44 stand rejected under 35 U.S.C. § 103 as being unpatentable over Karasawa and Kojima.

Claims 45-48 stand rejected under 35 U.S.C. § 102 as being anticipated by Karasawa.

We refer to the Final Rejection (Paper No. 7) and the Examiner's Answer (Paper No. 14) for a statement of the examiner's position and to the Brief (Paper No. 13) and the

¹ The file contains a 5-page partial English translation, apparently provided by appellants with the Information Disclosure Statement filed August 6, 1996 (Paper No. 3), although counsel for appellants was unable to confirm such at the oral hearing. We have obtained a complete translation of the document (on which we rely) from the USPTO translation branch (translation dated June, 1999) and are enclosing a copy with this decision.

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Reply Brief (Paper No. 15) for appellants' position with respect to the claims which stand rejected.

OPINION

The examiner's rejection of claims 45-48 for anticipation by Karasawa is set forth on pages 10 and 11 of the Final Rejection. Appellants respond that the subject matter of independent claim 45 is not anticipated because Karasawa uses fixed, predetermined time periods for scanning. (See Brief, page 11.) Appellants' position, as stated on pages 4 through 6 of the Brief, is that Karasawa discloses an interval "T1 x N" that is fixed before scanning, and thus does not monitor the writing or reading of the image signal to or from the memory (output buffer) as claimed.

We agree with appellants that the disclosure of Karasawa fails to meet the terms of instant claim 45. As described in the paragraph bridging pages 5 and 6 of the (USPTO) translation, the amount of data produced in one scan, "D," is first determined. "D" is determined on the basis of parameters such as desired magnification and trimming of the image from the original 2. Based on the amount of data "H" that the external equipment 16 can receive "per 1 scan timing," a minimum transmission parameter "N" is determined to ensure that all the data can be received by the external apparatus before the next scan cycle commences.

As explained on pages 5 and 6 of the Karasawa translation, control section 6 sends transmission parameter N to read timing control section 13, which instructs data control section 14 of the “read timing” ($T_1 \times N$), which is the minimum scanning time required by the scanning components times the parameter “N,” to lengthen the scan cycle if necessary should the external equipment 16 require more time to receive the data. Note Figure 5 and compare Figure 6a (N=1) with Figure 6b (N=2); in Figure 6b the “read timing” is effectively doubled to allow for the longer time the external apparatus requires for receiving data from “Memory A read” and “Memory B read.”

Instant claim 45 requires, inter alia, a discriminator which discriminates “whether transfer of an image signal from the image pickup device to the memory is in operation,” and a controller which controls the timing “of next exposure of the image pickup device in accordance with a result of the discriminator.” Although there inherently must be some sensing of the image signal being written to memory 14b or 14c (Fig. 5), there is no disclosure that this sensing, or discrimination, affects the timing for the next exposure cycle. The timing for the next cycle is determined, in contradistinction, by the time that is to be required for the external apparatus to receive the data to be transferred in the next cycle. The determination occurs prior to any operations which concern the data output buffers.

We therefore conclude that the examiner's finding of anticipation of claim 45 is in error. We do not sustain the section 102 rejection of claim 45, nor the rejection of claims 46-48 dependent thereon.

Neither can we sustain the section 103 rejection of independent claims 1, 6, 9, and 18. The claims require, to varying degrees, an association between discriminating or detecting the operation state of a reading device, or one of a writing device and a reading device, and controlling a function of the image pickup device in accordance with the operation state of the reading device or writing device. Karasawa does not disclose or suggest that the operation of the image sensor is influenced by any discrimination or detection of the reading or writing of the image data to or from the output buffers. Nor do we find that Kojima remedies the deficiency of Karasawa.

For claims 1-4 and 6-9 (claims 1, 6, and 9 independent), the examiner points to column 5, lines 13-20, in Kojima's "Summary of the Invention" section, for disclosure of a "controlling device for controlling/discriminating operation of writing means and reading means one after another in a cycle...." (Final Rejection, page 5.) The examiner next quotes from claim 37 of Kojima, at column 28, lines 10-16 of the reference, and then back to the same section of the "Summary of the Invention." "[T]hese controlling means inherently control the reading and writing operations in accordance with the result of discrimination." (Final Rejection, page 6.)

Neither of these identified sections, however, speak to the above-noted requirements of independent claims 1, 6, and 9. As such, a prima facie case of obviousness has not been established for the subject matter set out forth by those claims. The rejection for independent claim 18 (Final Rejection, pages 7-8) points to the same sections of Kojima (i.e., in the “Summary of the Invention” and Kojima’s claim 37) for disclosing or suggesting the admitted deficiencies of Karasawa. We also conclude that prima facie obviousness of the subject matter of claim 18 has not been shown, in view of the evidence provided.

In light of the claims depending from independent claims 1, 6, 9, and 18, we therefore do not sustain the rejection of claims 1-9, 18-21, 23-35, 37-41, and 43.

We next turn to regard the subject matter of independent claims 10 and 22. Appellants allege (Brief, page 10) that the thing missing from the teachings of Karasawa and Kojima is “a step of exposing an image pickup device after a relative movement is completed.” Appellants deem that column 11, lines 34-39 of Kojima is irrelevant to exposing an image pickup device “after relative movement is completed.” This is because, according to appellants, the passage pertains to an initial calibration step in which the sensor is moved to the position of a white plate. “As such, this passage is not relevant to the identified feature of claim 10.” (Id.)

Kojima discloses, as shown in Figure 1 and described at column 6, line 56 through column 8, line 10, an image reader and reproducing system upon which an original

document 13 is placed. A line sensor 1 is supported by a carriage unit 4, which is moved by motor section 8. The line sensor is driven to scan the original document between leading edge P2 and trailing edge P3. Position detector circuit 9, in concert with rotary encoder 8c in motor section 8, supplies information regarding the displacement of line sensor 1 with respect to a reference position P0.

As shown in the flowchart of Figure 6 and described at column 11, lines 34 through 40, the line sensor 1 is moved to position P1 before scanning commences. Also, as appellants acknowledge, Kojima discloses performing image exposure while the object (document 13) and the image pickup device (line sensor 1) are in relative motion, as illustrated by Kojima's Figure 8.

We, unlike appellants, consider Kojima's description of "initial calibration" to be relevant, in view of the broad recitations of instant claim 10. The claim sets forth a discriminator which discriminates "whether a relative movement" is executed between the object and the image pickup device, which is fairly descriptive of the "initial calibration" and position detection described by Kojima. Claim 10 also sets forth a controller which controls writing and/or reading devices such that writing and/or reading of the image signal is performed "during a relative movement." Kojima discloses that writing and/or reading occurs with respect to buffer memory 7 (Fig.1) during the "relative movement" related to the actual scanning; see, for example, column 18, lines 47-54. Claim 10 ends with the clause "wherein the image pickup device is exposed after a relative movement is completed."

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Kojima discloses that line sensor 1 is exposed at least subsequent to the relative movement related to the “initial calibration” -- we add, for that matter, that line sensor 1 is exposed subsequent to the relative movement related to any prior scan which has been completed.

We are thus unconvinced that the requirements of claim 10 are not disclosed or suggested by the applied prior art. We recognize that appellants’ disclosed “relative movements” may be different from the “relative movements” disclosed by Kojima, but the broad terms of claim 10 do not set forth the distinctions. Claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Independent Claim 22, although drawn to a process, is similar to claim 10 in its recitations of “a relative movement.” Appellants rely on the arguments presented for claim 10 (see Brief, page 10), and we sustain the rejection of claim 22.

Appellants submit separate arguments for two groups of dependent claims on pages 11 and 12 of the Brief. We agree, with respect to each group, that the references fail to establish prima facie obviousness of the relevant subject matter. Claims 23, 29, 27, 32, and 38 depend from base claims having rejections which we have not sustained, and

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we also reverse the rejection of these dependent claims for the additional reasons advanced by appellants. We do not sustain the rejection of claims 34 and 40 (depending from claims 10 and 22, respectively), nor the rejection of claim 43 (depending from claim 22). We note, however, that claim 35 depends from claim 34, and claim 41 depends from claim 40. We therefore do not sustain the rejection of claims 35 and 41.

In view of the dependent claims which fall with independent claims 10 and 22 (see 37 CFR § 1.192(c)(7)), we sustain the section 103 rejection of claims 10, 11, 13-17, 22, 36, 42, and 44.

CONCLUSION

We have reversed the section 102 rejection of claims 45-48. We have reversed the section 103 rejection of claims 1-9, 18-21, 23-35, 37-41, and 43, but have affirmed the section 103 rejection of claims 10, 11, 13-17, 22, 36, 42, and 44.

The examiner's decision in rejecting claims 1-11 and 13-48 is thus 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

JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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HOWARD B. BLANKENSHIP)	
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