THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.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 GOVIND SHAH,
DAVID G. SHAW, and DONALD G. CHANDLER

Appeal No. 96-2573
Application 08/331,168[1]

ON BRIEF

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

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

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[1] Application for patent filed October 28, 1994. According to appellants, this application is a continuation of Application 08/172,377, filed December 22, 1993; which is a division of Application 08/109,692, filed August 20, 1993, now U.S. Patent No. 5,291,564, issued March 1, 1994.

This is a decision on appeal from the final rejection of claims 27, 39, 42, 43, 45, 57, 60 and 61, all of the claims pending in the application.

The invention is directed to an optical target acquisition system for acquiring an optical target affixed to the surface of a package.

Representative independent claim 27 is reproduced as follows:

27. An optical target acquisition system for acquiring an optical target affixed to a surface of a package, comprising:

an optical scanning device for scanning said surface of said package and generating an optical target input signal;

a height sensor for sensing a height associated with said surface of said package and generating a height signal representative of a scanning distance between said optical target and said optical scanning device;

first converting means for receiving said optical target input signal and converting said optical target input signal in accordance with a first sampling frequency to provide a converted input signal;

means for adjusting a second resampling frequency in accordance with said height signal;

second reconverting means for receiving said converted input signal and reconverting said converted input signal in accordance with said second resampling frequency to generate a frequency shifted optical target signal; and

means for acquiring said optical target on said surface of said package in accordance with said frequency shifted optical target signal.

The examiner relies on the following reference:

Chandler et al. [Chandler] 4,874,936 Oct. 17, 1989

Claims 27, 39, 42, 43, 45, 57, 60 and 61 stand rejected under 35 U.S.C. § 103 as unpatentable over Chandler.[2]

Reference is made to the brief[3] and answer for the respective positions of appellants and the examiner.

OPINION

At the outset, we note that, in accordance with appellants' grouping of the claims at page 5 of the brief, all the claims will stand or fall together.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual

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[2] A previous rejection of the claims under 35 U.S.C. § 101 as being directed to nonstatutory subject matter was withdrawn by the examiner and is not before us on appeal.

[3] A reply brief, filed June 14, 1996, was refused entry by the examiner and is not before us.

determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044. 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

In the instant case, the examiner rejects the claims under 35 U.S.C. § 103, setting forth the statement of

rejection at page 5 of the answer,[4] and proceeds, at pages 5-6 of the answer, to set forth the reasoning for the rejection of independent claims 27 and 45. Nowhere in this reasoning does the examiner recognize any differences between the claimed subject matter and that alleged to be taught by Chandler. While such a rejection is not, technically, improper, since anticipation is the epitome of obviousness, In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982), it is merely a matter of curiosity as to why, if the examiner, indeed, thought that there were no differences, the rejection was not made under 35 U.S.C. § 102.

At page 9 of the answer, the examiner concedes that Chandler "does not teach all of the elements recited in the claimed invention." However, as stated supra, the examiner's rejection never alleges what elements of the claimed invention are missing from Chandler.

In any event, in responding to appellants' arguments, the examiner, for the first time, recognizes a difference, reporting, at page 8 of the answer, that

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[4] It is noted that in the statement of the rejection, the examiner mentions a claim "47" but it is clear that this should have been claim "57."

> [w]hile...Chandler...does not specifically and expressly disclose sensing and generating a height signal representative of a scanning distance between said optical target and said optical scanning device, such signals are readily picked-up and generated by the sensor utilized by...Chandler...

Then, at the top of page 9 of the answer, the examiner concludes that it would have been obvious

> ...to provide for the specific sensing and generating a height signal representative of a scanning distance between said optical target and said optical scanning device in...Chandler...

because this “is a routine design choice...” We are unclear as to what the examiner is driving at here since it is clear in Chandler that the height signal is, indeed, representative of the distance between the optical target and the optical scanning device (column 22, lines 22-37). No “design choice” would be needed since, in our view, such generation of a height signal is taught by Chandler. However, this height signal appears to be used only to adjust the focus of the camera. While this may also be one of appellants’ uses of the height signal, as claimed, the height signal is also used to adjust a second resampling frequency which is, in turn, used to generate a frequency shifted optical target signal which is

then employed to acquire the optical target on the surface of the package.

We would agree with the examiner that Chandler is clearly related to the instant claimed invention with regard to optically readable labels on packages.[5] However, while many of the elements are the same, including, for example, a height sensor, whereas Chandler is concerned with encoding and retrieving information on and from an optically readable label, the instant claimed invention is concerned with optical target acquisition. To that end, the instant claims call for converting the optical target input signal in accordance with a first sampling frequency to provide a converted input signal and for adjusting a second resampling frequency in accordance with the height signal. Then, a second reconverting means receives the converted input signal and reconverts the converted input signal in accordance with the second resampling frequency to generate a frequency shifted optical target signal which is then employed to acquire the optical target on the surface of the package.

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[5] Both the Chandler patent and the instant application are assigned to the same assignee, United Parcel Service of America, Inc.

We find no such sampling and resampling frequencies in Chandler employed in any such manner so as to generate a frequency shifted optical target signal as claimed. The examiner refers us to column 22, lines 55-59 of Chandler for a teaching of converting the optical target input signal in accordance with a first sampling frequency to provide a converted input signal. While there is disclosure thereat regarding conversion of an analog signal to a digital signal, there is no teaching thereat of converting with a first sampling frequency. However, we are willing to concede that an analog-to-digital converter will inherently employ a sampling signal in order to effect the conversion. Then, the examiner points to column 24, lines 27-32 of Chandler for a teaching of adjusting a second resampling frequency in accordance with the height signal. However, when we refer to the cited portion, we find nothing there regarding a height signal or adjusting a resampling frequency in accordance therewith. The cited portion is concerned only with a bandpass filter, disclosing a certain frequency band in order to keep label distortions to a minimum. Perhaps the examiner intended column 22, lines 27-32 wherein, at least, there is a

mention of a height sensor. But, even here, there is no teaching or suggestion of adjusting a second resampling frequency in accordance with the height signal.

With regard to a second reconverting means for reconverting the converted input signal in accordance with the second resampling frequency to generate a frequency shifted optical target signal, the examiner refers us to column 24, line 15 through column 25, line 1 of Chandler. The examiner does not explicitly identify the particular portion of column 24 which is relied upon and, while there is some disclosure therein of sampling and verifying the existence of a target and accurately determining its location (lines 59-61), we fail to find the first converting means, the means for adjusting and the second reconverting means, having the inter-relationship set forth in instant claim 27, i.e., where the second reconverting means receives the converted input signal and reconverts that signal in accordance with the second resampling frequency in order to generate the frequency shifted optical target signal. Independent method claim 45 has similar language.

We agree with the examiner that, for the most part, appellants' arguments are not directed to any specific claim limitations in order to distinguish over Chandler. However, appellants do argue, at page 17 of the brief, that, with regard to Chandler,

> [n]o teaching or suggestion of a "means for adjusting a second resampling frequency in accordance with [a] height signal" is disclosed

and that

> Chandler does not disclose or suggest the provision of a signal responsive to the frequency shifted optical target signal for indicating acquisition of the target, nor does it disclose or suggest any means for acquiring said optical target signal *in accordance with said frequency shifted optical target signal* [Emphasis in the original].

We are in agreement with these arguments by appellants.

The examiner's decision rejecting claims 27, 39, 42, 43, 45, 57, 60 and 61 under 35 U.S.C. 103 is reversed.

REVERSED

James D. Thomas Administrative Patent Judge	)
Errol A. Krass Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
Anita Pellman Gross Administrative Patent Judge	)

tdc

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Application No. 08/331,168

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