

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT F. SADLER.

Appeal No. 2006-3222
Application No. 10/195,588
Technology Center 3600

Decided: February 27, 2007

Before JOSEPH F. RUGGIERO, LANCE LEONARD BARRY, and
ALLEN R. MACDONALD, *Administrative Patent Judges*.

MACDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 15, 16, and 18-32.

THE INVENTION

The disclosed invention pertains to a system and method for integrating a self-checkout system into an existing store system. A first embodiment of the

Appeal No. 2006-3222
Application No. 10/195,588

invention provides a self-checkout terminal system, comprising a self-checkout core application module for controlling a self-checkout terminal. An emulator module connected to the self-checkout core application module emulates a native vendor software application in a network of cashier-operated checkout terminals administered by a vendor server computer. The self-checkout application converts inputs received at peripheral input devices into inputs expected by the emulated native vendor software application, and converts device update outputs from the emulated native vendor software application into updates to the peripheral output devices (Specification 2).

Representative claim 15 is illustrative:

15. A method of integrating a self-checkout terminal into a retail store system in which a vendor server communicates with a cashier-operated checkout terminal through native vendor software running on the cashier-operated checkout terminal, comprising:

providing on the self-checkout terminal, self-service software that is interactive with a user of the terminal through input and output devices that the self-service software controls;

providing the native vendor software on the self-checkout terminal, to be run concurrently with the self-service software; and

Appeal No. 2006-3222
Application No. 10/195,588

providing on the self-checkout terminal, emulator module software providing interfaces between the self-service software, the native vendor software on the self-checkout terminal and the vendor server with which the self-checkout terminal can communicate.

THE REFERENCES

The Examiner relies upon the following references as evidence of unpatentability:

Iguchi	US 5,745,705	Apr. 28, 1998
Matsumori	US 6,179,206 B1	Jan. 30, 2001

“Microsoft Press Computer Dictionary”, Third Edition, 1997, page 175.

The following rejection is on appeal before us:

1. Claims 15, 16, and 18-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Iguchi in view of Matsumori, and further in view of Microsoft Press Computer Dictionary.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for the respective details thereof.

OPINION

Only those arguments actually made by Appellant have been considered in this decision. It is our view, after consideration of the record before us, that the evidence relied upon by the Examiner does not support the Examiner’s rejections of claims 15, 16, and 18-32. Accordingly, we reverse.

MOTIVATION

Although we need not reach the issues of hindsight and secondary considerations to decide this appeal, we have addressed these issues *infra* to clarify the record for the benefit of both the Examiner and the Appellant.

With respect to all claims on appeal, Appellant argues that the Examiner has impermissibly applied hindsight in formulating the rejection (Br. 13).

In response, the Examiner argues that one of ordinary skill in the art would have been motivated to add self-checkout terminals to an existing cashier operated checkout terminal system in order to provide customers the capability to check themselves out. The Examiner notes that emulation is notoriously well known in the art. Therefore, the Examiner concludes that one of ordinary skill in the art would have been motivated to use emulation software to allow self-checkout terminals to “imitate” existing cashier-operated checkout terminals in order to effect communication between the self-checkout terminals and an existing system (Answer 5-6).

After carefully considering all of the evidence before us, we do not agree with Appellant’s contention that the Examiner has impermissibly applied hindsight in formulating the rejection. We note that both the Iguchi and Matsumori references are broadly directed to Point-Of-Sale (POS) systems. The Examiner relies upon Matsumori particularly for its teaching of a self-scanning and self-checkout POS system (*see e.g.*, col. 1, l. 63). We agree with the Examiner that emulation, as disclosed by Microsoft Press Computer Dictionary, is notoriously well known in the software art.

In particular, when we review Appellant’s own description of the prior art, we note that Appellant has acknowledged that retail stores have recently started to

Appeal No. 2006-3222
Application No. 10/195,588

introduce self-checkout terminals where the checkout function is performed by the retail customer instead of the store employee (Specification 1). Appellant further acknowledges that prior art self-checkout systems are difficult to integrate into an already existing network of cashier-operated checkout terminals because of incompatible software systems (*id.*). In describing the prior art, we note that Appellant specifically admits there is a need for a system for integrating a self-checkout system into an already existing store (Specification 2).

The Court of Appeals for the Federal Circuit has determined that the motivation to combine under § 103 must come from a teaching or suggestion within the *prior art*, within the *nature of the problem to be solved*, or within the *general knowledge of a person of ordinary skill* in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 665, 57 USPQ2d 1161, 1167 (Fed. Cir. 2000) (emphasis added). Because emulation is notoriously well known in the software art, we find the *nature of the problem to be solved* (i.e., as described in Appellant's description of the prior art) would have reasonably suggested combining the teachings of the references in the manner proffered by the Examiner.

Furthermore, our reviewing court has recently reaffirmed that "an implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the 'improvement' is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient ... In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him *capable* of

Appeal No. 2006-3222
Application No. 10/195,588

combining the prior art references.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368, 80 USPQ2d 1641, 1651 (Fed. Cir. 2006) (emphasis in original). In the instant case, we find that the ordinary artisan who possessed knowledge and skills relating to POS systems at the time of the invention would have been *capable of* combining the teachings of Iguchi, Matsumori, and Microsoft Press Computer Dictionary for the purpose of providing more *efficient* interoperability between incompatible prior art POS software systems.

For at least the aforementioned reasons, we find Appellant’s own description of deficiencies in the prior art establishes an adequate suggestion that supports the Examiner’s conclusion that an artisan would have been motivated to combine the teachings of Iguchi, Matsumori, and Microsoft Press Computer Dictionary in the manner claimed.

EVIDENCE OF SECONDARY CONSIDERATIONS

Appellant argues that secondary considerations of record have not been adequately considered by the Examiner. Appellant points to Exhibit II, the Declaration of Robert Sadler, as providing evidence of commercial success and the failure of others (Br. 14).

The Examiner disagrees. The Examiner asserts that the evidence of commercial success is not convincing. Significantly, the Examiner argues that Appellant has failed to present evidence showing a correlation or nexus between the proffered commercial success and the use of emulation.

We note that to be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be

Appeal No. 2006-3222
Application No. 10/195,588

relevant to the subject matter as claimed, and therefore the Examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-74 n.42 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986). The term “nexus” is often used to designate a legally and factually sufficient connection between the objective evidence of nonobviousness (i.e., proven success) and the claimed invention so that the evidence is of probative value in the determination of nonobviousness. “A prima facie case of nexus is generally made out when the patentee [i.e., Appellant] shows both that there is commercial success, and that the thing (product or method) that is commercially successful is the invention disclosed and claimed . . .” *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392, 7 USPQ2d 1222, 1226 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 956 (1988). *See also* MPEP § 716.01(b).

In the instant case, we find the “Declaration of Robert Sadler” does provide evidence of commercial success, but fails to show a legally and factually sufficient connection between such commercial success and the instant claimed emulation module software and associated interfaces. We note the “Declaration of Robert Sadler” merely describes a product advertisement, a financial statement, and a “belief” expressed by Mr. Sadler that the features of the instant invention were “an important factor” to a “potential customer” (Exhibit II).

We now address specific claim limitations argued by Appellant within the Briefs.

Appeal No. 2006-3222
Application No. 10/195,588

Independent claims 15, 20, 28, and 31

We consider first the Examiner's rejection of claims 15, 20, 28, and 31 as being unpatentable over the teachings of Iguchi in view of Matsumori, and further in view of Microsoft Press Computer Dictionary. Since Appellant's arguments with respect to this rejection have treated these claims as a single group which stand or fall together, we will select independent claim 15 as the representative claim for this rejection because it is the broadest independent claim in this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellant argues that Iguchi, Matsumori, and "Microsoft Press Computer Dictionary" do not teach and do not suggest the claimed "emulator module software providing interfaces between the self-service software, the native vendor software on the self-checkout terminal and the vendor server with which the self-checkout terminal can communicate" (Br. 9).

The Examiner disagrees. The Examiner states that she has construed the claimed interfaces as encompassing the emulator which intercepts communications directed to and from the self-service software which also intercepts communications directed to and from the peripheral devices of the self-checkout terminal (Answer 7).

With respect to the role of the Examiner as finder of fact, the Court of Appeals for the Federal Circuit has stated: "the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). After carefully reviewing the evidence before us, we fail to find a specific disclosure of "emulator module software providing *interfaces* between the self-service software, the native vendor software on the self-checkout terminal and

Appeal No. 2006-3222
Application No. 10/195,588

the vendor server with which the self-checkout terminal can communicate,” as claimed. While we agree with the Examiner that emulation is notoriously well known in the software art, we nevertheless find the proffered “Microsoft Press Computer Dictionary” definition of “emulation” falls short of teaching or fairly suggesting the specific “interfaces” recited within each independent claim. Therefore, we agree with Appellant that the Examiner has failed to meet the burden of presenting a prima facie case of obviousness. Accordingly, we will reverse the Examiner’s rejection of representative claim 15. We note that the remaining independent claims 16, 20, 28, and 31 each recite “interface” limitations equivalent to claim 15. Therefore, we will reverse the Examiner’s rejection of independent claims 16, 20, 28, and 31 for the same reasons discussed *supra* with respect to claim 15. Because we have reversed the Examiner’s rejection of each independent claim, we will not sustain the Examiner’s rejection of any of the dependent claims under appeal.

DECISION

In summary, we have reversed the Examiner’s rejection of all the claims on appeal. Therefore, the decision of the Examiner rejecting claims 15, 16, and 18-32 is reversed.

Appeal No. 2006-3222
Application No. 10/195,588

REVERSED

pgc/ce

PAUL W. MARTIN
NCR CORPORATION, LAW DEPT.
1700 S. PATTERSON BLVD.
DAYTON OH 45479-0001