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7 UNITED STATES PATENT AND TRADEMARK OFFICE

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10 BEFORE THE BOARD OF PATENT APPEALS
11 AND INTERFERENCES
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14 *Ex parte* THOMAS M. KEELEY
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17 Appeal 2008-3786
18 Application 09/407,664
19 Technology Center 3600
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22 Decided: December 22, 2008
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25 Before HUBERT C. LORIN, ANTON W. FETTING, and DAVID B. WALKER,
26 *Administrative Patent Judges.*

27 FETTING, *Administrative Patent Judge.*

28 DECISION ON APPEAL

29 STATEMENT OF THE CASE

30 Thomas M. Keeley (Appellant) seeks review under 35 U.S.C. § 134 of a final
31 rejection of claims 40-47, 49-56, 58-64, 69-74, and 76-79, the only claims pending
32 in the application on appeal.

1 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

2
3 We AFFIRM.

4 The Appellant invented a system and method for collecting intelligence data in
5 order to determine a customer's equipment maintenance or replacement needs
6 (Specification: page 1, lines 5-10).

7 An understanding of the invention can be derived from a reading of exemplary
8 claims 40, 50, and 60, which are reproduced below [bracketed matter and some
9 paragraphing added].

10 40. A factory automation system for providing status information on
11 at least one factory automation component, comprising:

- 12 [1] a factory automation component distributed by a first party;
13 [2] the component residing at a site location of a second party; and
14 [3] the component communicating status information directly to the
15 first party wherein the first party compiles the status information from
16 the component and utilizes the status information to the benefit of the
17 second party, the status information comprises component source
18 information, first party site address information, component type
19 information, second party site information and component health
20 information;
- 21 [4] wherein the server site of the first party communicates version
22 upgrade information to the component in response to version
23 information from the component that does not correspond to a latest
24 version.

25
26 50. An Internet business communication system, including:

- 27 [1] a website employed by a vendor for receiving factory
28 automation component status information over the Internet directly
29 from a plurality of factory components residing at one or more

1 customer sites, each component having a different IP address, the
2 website matching component information residing at the vendor's
3 website with the IP address of the component and providing this
4 information to the vendor, the status information comprises
5 component type information, component health information, customer
6 name information, customer site information and component location
7 information;

8 [2] wherein the status information further includes the component
9 version information, such that the website communicates version
10 upgrade information to at least one of the plurality of components in
11 response to outdated component version information.

12
13 60. The method of claim 59, wherein the status information includes
14 an IP address associated with the component and the step of searching
15 includes matching the customer identification information and
16 component location information corresponding to the IP address
17 included in the status information.

18
19 This appeal arises from the Examiner's final Rejection, mailed October 7,
20 2005. The Appellant filed an Appeal Brief in support of the appeal on May 21,
21 2007. An Examiner's Answer to the Appeal Brief was mailed on September 6,
22 2007. A Reply Brief was filed on November 6, 2007.

23 PRIOR ART

24 The Examiner relies upon the following prior art:

Shigematsu et al.	US 5,432,715	July 11, 1995
Martinez et al.	US 5,956,665	Sep. 21, 1999
Ogushi et al.	US 6,385,497 B1	May 7, 2002
Sekizawa	US 6,430,711 B1	Aug. 6, 2002

1 REJECTIONS

2 Claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 stand rejected under 35
3 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez.

4 Claims 50-56 and 58 stand rejected under 35 U.S.C. § 103(a) as unpatentable
5 over Ogushi, Shigematsu, Sekizawa, and Martinez.

6 Claims 60 and 77 stand rejected under 35 U.S.C. § 103(a) as unpatentable over
7 Ogushi, Shigematsu, Martinez, and Sekizawa.

8 ISSUES

9 The issues pertinent to this appeal are:

- 10 • Whether the Appellant have sustained their burden of showing that the
11 Examiner erred in rejecting claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-
12 79 under 35 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and
13 Martinez.
- 14 • Whether the Appellant have sustained their burden of showing that the
15 Examiner erred in rejecting claims 50-56 and 58 under 35 U.S.C. § 103(a) as
16 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.
- 17 • Whether the Appellant have sustained their burden of showing that the
18 Examiner erred in rejecting claims 60 and 77 under 35 U.S.C. § 103(a) as
19 unpatentable over Ogushi, Shigematsu, Martinez, and Sekizawa.

20
21 The pertinent issue turns on whether Ogushi, Shigematsu, and Martinez
22 describe communicating upgrade information to the component in response to
23 version information from the component that does not correspond to a latest

1 equipment at the factory to the vendor of the equipment (col. 3, ll. 15-29,
2 col. 5, ll. 64-67, and figure 5).

3 07. Ogushi describes the equipment and the factory in a remote location
4 from the vendor that receives the status information (figure 1 and col. 3,
5 ll. 15-29).

6 08. The transmitted status information includes an address/URL of the
7 host systems, the serial number of the equipment, model of the
8 equipment, date and time information, an error code, emergency degree,
9 countermeasures, trouble state, and progress (col. 4, ll. 14-21 and col.
10 5, ll. 55-63).

11 09. The status information is transmitted from the equipment to the host
12 computer. The information is then transmitted to the vendor in order for
13 the vendor to provide maintenance support for the equipment. The host
14 computer of the vendor searches through a trouble database to find
15 solutions and countermeasures to the trouble state (figure 2, col. 3, ll. 55-
16 67, and col. 4, ll. 37-56).

17 10. The host computer automatically maintains the equipment by software
18 updating (col. 3, ll. 64-67).

19 11. The vendor can retrieve a new version of the software to be used for
20 maintenance (col. 6, ll. 1-3).

21 *Sekizawa*

22 12. Sekizawa is directed to a machine monitoring system for monitoring
23 the state of plurality of connected machines (col. 1, ll. 8-9).

1 U.S.C. § 103(a) (2000); *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1729-30
2 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

3 In *Graham*, the Court held that that the obviousness analysis is bottomed on
4 several basic factual inquiries: “[(1)] the scope and content of the prior art are to be
5 determined; [(2)] differences between the prior art and the claims at issue are to be
6 ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383
7 U.S. at 17. *See also KSR*, 127 S.Ct. at 1734. “The combination of familiar
8 elements according to known methods is likely to be obvious when it does no more
9 than yield predictable results.” *Id.*, at 1739.

10 “When a work is available in one field of endeavor, design incentives and
11 other market forces can prompt variations of it, either in the same field or a
12 different one. If a person of ordinary skill can implement a predictable variation, §
13 103 likely bars its patentability.” *Id.* at 1740.

14 “For the same reason, if a technique has been used to improve one device,
15 and a person of ordinary skill in the art would recognize that it would improve
16 similar devices in the same way, using the technique is obvious unless its actual
17 application is beyond his or her skill.” *Id.*

18 “Under the correct analysis, any need or problem known in the field of
19 endeavor at the time of invention and addressed by the patent can provide a reason
20 for combining the elements in the manner claimed.” *Id.* at 1742.

21 *Automation of a Known Process*

22 It is generally obvious to automate a known manual procedure or mechanical
23 device. Our reviewing court stated in *Leapfrog Enterprises Inc. v. Fisher-Price*
24 *Inc.*, 485 F.3d 1157 (Fed. Cir. 2007) that one of ordinary skill in the art would have
25 found it obvious to combine an old electromechanical device with electronic

1 circuitry “to update it using modern electronic components in order to gain the
2 commonly understood benefits of such adaptation, such as decreased size,
3 increased reliability, simplified operation, and reduced cost. . . . The combination
4 is thus the adaptation of an old idea or invention . . . using newer technology that is
5 commonly available and understood in the art.” *Id* at 1163.

6 ANALYSIS

7 *Claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 stand rejected under 35*
8 *U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez*

9 The Appellant argues these claims as a group.

10 Accordingly, we select claim 40 as representative of the group.
11 37 C.F.R. § 41.37(c)(1)(vii) (2007).

12 The Examiner found that Ogushi taught all of the limitations of claim 40
13 except “component source information” and “version information from the
14 component that does not correspond to a latest version” (Answer 4-5). The
15 Examiner found that these limitations were taught by Shigematsu and Martinez
16 respectively (Answer 4-5). The Examiner concluded that it would have been
17 obvious to combine Ogushi, Shigematsu, and Martinez in order to create a more
18 robust system (Answer 5).

19 The Appellant contends that 1) none of the references disclose “wherein the
20 server site of the first party communicates version upgrade information to the
21 component in response to version information from the component that does not
22 correspond to a latest version” (App. Br. 8, first paragraph), specifically that the
23 information is not communicated *to the component* in response to version
24 information from the component that does not correspond to a latest version (App.

1 Br. 8, last paragraph) and 2) there is no motivation to combine the references (App.
2 Br. 9, last paragraph) because a) the Examiner failed to cite where in the reference
3 there is a motivation to combine the references (App. Br. 9, last paragraph) and b)
4 the references are non-analogous (App. Br. 10, second paragraph) and the
5 Examiner has used impermissible hindsight in combining the references (App. Br.
6 11, second paragraph).

7 We disagree with the Appellant. First, only limitation [4] is being contested
8 and all other limitations are described by Ogushi, Shigematsu, and Martinez (FF
9 02, FF 04, FF 06, FF 07, FF 08, FF 09, and FF 11).

10 The Appellant first contends that Ogushi fails to describe limitation [4] (App.
11 Br. 8, last paragraph). The Appellant specifically argues that Ogushi is only
12 concerned with archiving information associated with an item, rather than
13 communicating upgrade information to the component in response to version
14 information from the component (App. Br. 8, last paragraph).

15 We disagree with the Appellant. Ogushi describes a system where a host
16 computer receives status and trouble information from industrial components (FF
17 08 and FF 09). Thus, the information is received from the component. This
18 information is then transmitted to the vendor of the components (FF 09). The
19 vendor then searches a trouble database to find a solution or countermeasure to the
20 trouble state (FF 09) and automatically updates software to the component as
21 necessary (FF 10). A step of automatically updating software implicitly includes
22 performing a check to see whether the software is the most current. As such, this
23 step is functionally encompassing of communicating upgrade information to the
24 component.

1 Additionally, the vendor can retrieve a new version of the software for
2 maintenance (FF 11), which would imply checking for lack of correspondence
3 with the most current version before retrieving that version. It is generally obvious
4 to automate a known manual procedure or mechanical device. *Leapfrog*, 485 F.3d
5 at 1163.

6 The Appellant further contends that Shigematsu and Martinez fail to teach this
7 limitation (Br. Page 8, last paragraph and Br. Page 9, first paragraph). Appellant's
8 contention that Shigematsu and Martinez fail to teach this limitation does not
9 persuade us of error on the part of the Examiner, because the Appellant responds to
10 the rejection by attacking the references separately, even though the rejection is
11 based on the combined teachings of the references. Nonobviousness cannot be
12 established by attacking the references individually when the rejection is
13 predicated upon a combination of prior art disclosures. *See In re Merck & Co.*
14 *Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The Examiner found that Shigematsu
15 describes “component source information” and Martinez specifically describes the
16 use of version numbers. The Examiner found that Ogushi taught the remaining
17 limitations (Answer 4-5).

18 The Appellant additionally contends that there is no motivation to combine
19 Ogushi, Shigematsu, and Martinez because the Examiner failed to cite some
20 teaching or suggestion in the references to support the combination (App. Br. 9,
21 second paragraph). We agree with the Examiner. As discussed in *KSR*, 127 S.Ct.
22 at 1742, a specific teaching or suggestion to support the combination of the
23 references need not be found in the references. We find that the benefit of making
24 the system more robust by determining the most updated information would have
25 been apparent to one of ordinary skill in the art at the time of the invention.

1 The Appellant further contends that the references are non-analogous (App. Br.
2 10, second paragraph and third paragraph) and the Examiner used impermissible
3 hindsight in combining the references (App. Br. 11, second paragraph). We
4 disagree with the Appellant. Ogushi, Shigematsu, and Martinez are all concerned
5 with monitoring equipment (FF 01, FF 05, and FF 07). As such, Ogushi,
6 Shigematsu, and Martinez are analogous references. Furthermore, it would have
7 been apparent to one of ordinary skill in the art to combine Ogushi, Shigematsu,
8 and Martinez at the time of the invention (as discussed above). Thus, the
9 Examiner did not use impermissible hindsight analysis of the references. We find
10 that the Examiner did not err in combining Ogushi, Shigematsu, and Martinez in
11 rejecting claim 40.

12 The Appellant has not sustained his burden of showing that the Examiner erred
13 in rejecting claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 under 35 U.S.C. §
14 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez for the above
15 reasons.

16 *Claims 50-56 and 58 stand rejected under 35 U.S.C. § 103(a) as unpatentable*
17 *over Ogushi, Shigematsu, Sekizawa, and Martinez*

18 The Appellant argues these claims as a group. Accordingly, we select claim
19 50 as representative of the group.

20 The Examiner found that Ogushi teaches all of the limitations of claim 50,
21 except “name information and component information”, “each component having a
22 different IP address, the website matching component information residing at the
23 vendor’s website with the IP address of the component”, and “the status
24 information further includes version information from the component” (Answer
25 19). The Examiner found that Shigematsu, Sekizawa, and Martinez teach these

1 features, respectively (Answer 19). The Examiner concluded that it would have
2 been obvious to combine Ogushi, Shigematsu, Sekizawa, and Martinez in order to
3 create a more robust system (Answer 20).

4 The Appellant contends that Sekizawa fails to disclose “a website that
5 communicates upgrade information to a component that is running an outdated
6 version” (App. Br. 12, second paragraph). We disagree with the Appellants. The
7 Examiner found that Ogushi described this limitation (Answer 18-19, last
8 paragraph-first paragraph). As discussed above, nonobviousness cannot be
9 established by attacking the references individually when the rejection is
10 predicated upon a combination of prior art disclosures. *See In re Merck*, 800 F.2d
11 at 1097.

12 The Appellant further reiterates the lack of motivation to combine the
13 references and the impermissible hindsight arguments *supra* (App. Br. 12, second
14 paragraph). We disagree with the Appellant. Sekizawa is concerned with
15 monitoring the state of equipment (FF 12) and therefore provides implementation
16 details pertinent to practicing Ogushi, Shigematsu, and Martinez (FF 01, FF 05,
17 and FF 07). Thus, it would have been apparent to one of ordinary skill in the art at
18 the time of the invention to combine the references, and the Examiner did not use
19 impermissible hindsight analysis of the references.

20 Therefore, the Appellant has not sustained his burden of showing that the
21 Examiner erred in rejecting claims 50-56 and 58 under 35 U.S.C. § 103(a) as
22 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.

23 *Claims 60 and 77 stand rejected under 35 U.S.C. § 103(a) as unpatentable*
24 *over Ogushi, Shigematsu, Martinez, and Sekizawa*

1 The Appellant argues these claims as a group. Accordingly, we select claim 60
2 as representative of the group.

3 The Examiner found that Ogushi, Shigematsu, and Martinez teach all of the
4 limitations of independent claim 59 (as discussed above for claim 40) (Answer 23),
5 except for the feature of “the status information includes an IP address associated
6 with the component and the step of searching includes matching the customer
7 identification information and component location information corresponding to
8 the IP address included in the status information” (Answer 23). The Examiner
9 found that Sekizawa teaches this feature (Answer 23). The Examiner concluded
10 that it would have been obvious to combine this feature taught by Sekizawa to
11 Ogushi, Shigematsu, and Martinez to increase efficiency (Answer 23). Claims 60
12 and 77 depend from claims 59 and 74 respectively.

13 The Appellant contends Sekizawa fails to describe the deficiencies argued for
14 claim 40 above. As discussed above, we find that Ogushi, Shigematsu, and
15 Martinez describe claims 59 and 74, and thus Appellant’s contention that Sekizawa
16 fails to cure any deficiencies is not persuasive.

17 The Appellant further contends that one of ordinary skill in the art would not
18 have been motivated to combine Ogushi, Shigematsu, Martinez, and Sekizawa.
19 This argument was found to be insufficient to overcome their burden of showing
20 that the Examiner erred in rejecting claims 50-56 and 58 *supra* and is not found to
21 be persuasive here for the same reasons.

22 Therefore the Appellant has not sustained his burden of showing that the
23 Examiner erred in rejecting claims 60 and 77 under 35 U.S.C. § 103(a) as
24 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez.

1 CONCLUSIONS OF LAW

2 The Appellant has not sustained its burden of showing that the Examiner erred
3 in rejecting claims 40-47, 49-56, 58-64, 69-74, 76-79 under 35 U.S.C. § 103(a) as
4 unpatentable over the prior art.

5 DECISION

6 To summarize, our decision is as follows:

- 7 • The rejection of claims 40-47, 49, 59, 61-64, 69-74, 76, and 78-79 under 35
8 U.S.C. § 103(a) as unpatentable over Ogushi, Shigematsu, and Martinez is
9 sustained.
- 10 • The rejection of claims 50-56 and 58 under 35 U.S.C. § 103(a) as
11 unpatentable over Ogushi, Shigematsu, Sekizawa, and Martinez is sustained.
- 12 • The rejection of claims 60 and 77 under 35 U.S.C. § 103(a) as unpatentable
13 over Ogushi, Shigematsu, Martinez, and Sekizawa is sustained.

14 No time period for taking any subsequent action in connection with this appeal
15 may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2007).

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17 AFFIRMED
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Appeal 2008-3786
Application 09/407,664

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