

1 The opinion in support of the decision being entered today was *not* written
2 for publication and is *not* binding precedent of the Board
3

4 UNITED STATES PATENT AND TRADEMARK OFFICE
5

6
7 BEFORE THE BOARD OF PATENT APPEALS
8 AND INTERFERENCES
9

10
11 *Ex parte* GEORGE HARRY HOFFMAN, DANIEL SECHRIST,
12 ANTHONY FRANK MENNINGER
13 and MICHAEL JAMES BURK
14

15
16 Appeal 2006-2018
17 Application 09/815,731¹
18 Technology Center 3600
19

20
21 Decided: March 22, 2007
22

23
24 *Before:* TERRY J. OWENS, STUART S. LEVY, and ANTON W.
25 FETTING *Administrative Patent Judges.*
26

27 LEVY, *Administrative Patent Judge.*
28

29 DECISION ON APPEAL
30

31 STATEMENT OF CASE

32 Applicant appeals from a final rejection of claims 1 to 18 under
33 35 U.S.C. § 134 (2002). We have jurisdiction under 35 U.S.C. § 6(b)
34 (2002).

¹ Application filed March 23, 2001. The real party in interest is RESTAURANT SERVICES, INC.

1 The Examiner rejected claims 1-18 under 35 U.S.C. § 103(a) (2004)
2 as being unpatentable over Hafner in view of Yamamoto and Salvo.

3 Claim 1 is representative of the claims under appeal and reads as
4 follows:

5 1. A method for providing a supplier interface, comprising:

6
7 a) receiving data from a plurality of stores of a supply chain
8 utilizing a network, the data relating to an amount of goods sold by the
9 stores;

10
11 b) aggregating the data in a database;

12
13 c) receiving a request from a supplier, the request including a
14 plurality of supplier parameters;

15
16 d) extracting information from the database relevant to the
17 supplier parameters in response to the request;

18
19 e) transmitting the information from the database to the supplier
20 utilizing the network;

21
22 f) adjusting a supply of raw materials from which the goods are
23 produced based on the information; and

24
25 g) calculating a predicted amount of raw materials for a given
26 level of sales of goods sold by the store; and

27
28 h) comparing an amount of raw materials sold to a store and the
29 predicted amount of raw materials for the given level of sales of goods, to
30 thereby provide an indication of a level of discrepancy.

31
32 The prior art relied upon by the Examiner in rejecting the claims on
33 appeal is:

34 Hafner	5,893,076	Apr. 6, 1999
35 Yamamoto	5,914,878	Jun. 22, 1999

1 Salvo 6,341,271 Jan. 22, 2002 (Nov. 13, 1998)

2

3 Beginning with claim 1, Applicant contends that the claimed subject
4 matter would not have been obvious. More specifically, Applicant contends
5 that the reference disclosures cannot properly be combined because the
6 problem of detecting problems in the manufacturing/sales process is not
7 recognized in any of the references. (Br. 7). Applicants add (*id.*), that:

8 Specifically, the actual steps of "calculating a
9 predicted amount of raw materials for a given level
10 of sales" and then performing the step of "comparing
11 an amount of raw materials sold to a store and the
12 predicted amount of raw materials for the given level
13 of sales of goods" are not disclosed in any of the references.

14

15 With regard to independent claim 16, Applicant contends that the claim
16 recites

17 displaying an amount of raw materials sold to a
18 store on a same page or screen as a recipe-predicted
19 forecast for the raw material based on the amount
20 of the goods sold by the store, to thereby permit a
21 comparison and determination of variance due to
22 errors or loss; and determining a percentage of cost
23 of the good attributable to the raw material.

24 (Br. 8).

25

26 It is argued (Br. 8) that these references do not even recognize the
27 problem being addressed by the present claims, so, there could hardly be
28 motivation to fix such a problem.

29 The Examiner contends that it would have been obvious to adjust the
30 supply of raw materials in Hafner in view of the teachings and suggestions
31 of Yamamoto, and that it would have been obvious to compare the amount

1 of raw materials sold to a store with a calculated forecasted amount in view
2 of the teachings of Salvo. (Final Rejection 2-3).

3
4 We affirm.

5
6 ISSUE

7 The issue is whether Applicant has shown that the Examiner erred in
8 rejecting the claims 1-18 under 35 U.S.C. § 103(a) (2004). The issue turns
9 on whether there is a legally sufficient justification for combining the
10 disclosures of Hafner, Yamamoto and Salvo, and if combined, whether the
11 combined teachings of the references would have suggested the language of
12 claims 1-18 to and artisan. Specifically, the issue is:

13 whether the prior art teachings would have been combined by an artisan to
14 meet the claim language of:

15 g) calculating a predicted amount of raw materials
16 for a given level of sales of goods sold by the store;
17 and h) comparing an amount of raw materials sold
18 to a store and the predicted amount of raw materials
19 for the given level of sales of goods, to thereby
20 provide an indication of a level of discrepancy,
21 as recited in claim 1;

22
23 or g) displaying an amount of raw materials sold to a
24 store on a same page or screen as a recipe-predicted
25 forecast for the raw materials based on the amount of
26 the goods sold by the store, to thereby permit a
27 comparison and determination of variance due to errors
28 or loss, as recited in independent claim 16.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

FINDINGS OF FACT

1. Applicant invented a supplier interface in a supply chain management framework (Specification 1). Specifically, the invention is discloses (Specification 3) that:

Utilizing a network, data is received from a plurality of stores of a supply chain. This data relates to an amount of goods sold by the stores. The data is aggregated in a database. Subsequently, a request is received from a supplier which includes a plurality of supplier parameters. Information from the database relevant to the supplier parameters is extracted in response to the request and the information from the database is transmitted to the supplier utilizing the network. Also, a supply of raw materials from which the goods are produced is adjusted based on the information.

From our review of Hafner, we make the following findings of fact:

2. Hafner doiscloses a system for supplier driven processing of business transactions and interactive communications between a plurality of users within at least one industry including retailers and suppliers. (col. 1, ll. 8-11).

3. In this system, forecasting parameters are maintained by the supplier and a suggested order quantity is generated. Upon receipt of the suggested order, the supplier reviews overall demand and item availability and either approves or modifies the suggested order. (col. 2, ll. 32-36).

4. Inventory information may be point of sale data. (col. 4, ll. 2-3).

5. Point of sale information includes quantities of goods sold and returned, while inventory adjustments include decreases in safety stock and loss of inventory. (col. 4, ll. 7-10).

1 6. [S]uggested business transactions may be suggested order
2 quantities ("SOQs") along with other transaction related data. (col. 4, ll. 46-
3 48).
4

5 7. Next, a transmission of inventory adjustment and point of sale
6 information from value added network 30 to replenishment system 10
7 occurs. Value added network interface 210 receives inventory adjustment
8 and point of sale information from value added network 200. (col. 5, ll. 17-
9 22).
10

11 8. Inventory activity file 245 and stock data file 240 comprise inputs
12 to forecasting engine 230. (col. 5, ll. 34-35).
13

14 9. Assuming updated inventory information is available, forecasting
15 engine 230 predicts future inventory needs based on parameters entered by
16 the supplier, and on information from stock data file 240 and inventory
17 activity file 245. Forecasting engine 230 runs on demand or when requested
18 by scheduler 220. Suggested order quantity generator 270 generates SOQs
19 based on predictions from forecasting engine 230. (col. 5, ll. 41-48).
20

21 10. Next, the supplier either approves or changes the SOQ via the
22 replenishment application 300 and confirms the approval or change at
23 steps 620 and 630. This approval/change is communicated via the
24 communications manager 280 to PO [purchase order] generation function
25 275 at steps 640 and 650. Based on the approval/change and the SOQ file,
26 PO generation function 275 creates POs and communicates them to value
27 added network interface at step 680. (col. 6, ll. 29-37).
28

29 From our review of Yamamoto, we make the following finding of
30 facts:

31 11. Yamamoto's invention relates to a production system for retail
32 goods such as beauty products and more particularly to a production system
33 which receives sales information from retail outlets timely and with
34 accuracy and manufacture said goods with flexibility. (col. 1, ll. 12-16).
35

1 12. Yamamoto's invention relates, in another aspect, to a raw
2 material ordering system by which orders for raw materials necessary for the
3 production of products can be placed with flexibility . (col. 1, ll. 17-19).
4

5 13. It is, therefore, a first object of Yamamoto's invention to provide
6 an ideal production system, which takes in sales information from retail
7 outlets timely and with accuracy and manufactures products with flexibility
8 in quick response to the sales information. (col. 3, ll. 30-36).
9

10 14. Thus, this system comprises a retail sales information collecting
11 means, a production quantity setting means for determining a production
12 quantity according to the sales information collected by the first-mentioned
13 means, a directing means for directing the preparation and production of raw
14 materials according to the production quantity determined as above, and a
15 production means for producing the determined production quantity in
16 accordance with the direction. (col. 3, ll. 40-48).
17

18 15. [T]his production quantity data is fed to said directing means for
19 directing the preparation and production of necessary raw materials
20 (col. 3, ll. 53-55).
21

22 16. [S]aid retail sales information is collected from a plurality of
23 sample stores or departments and that said production quantity setting means
24 comprises a scale-up estimating routine for scaling-up of the retail sales
25 information and a demand forecast routine for predicting the demand
26 according to the scale-up estimate. (col. 4, ll. 4-9).
27

28 17. The retail sales information collecting means 1 comprises a
29 plurality of point-of-sale (POS) terminal units 1a, 1b, 1c . . . installed at
30 different retail outlets. (col. 7, ll. 65-67).
31

32 18. The production size setting means 2 includes a scale-up
33 estimating routine 5, a demand forecast routine 6 and a production size
34 determining routine 7. (col. 8, ll. 13-15).
35

36 19. Yamamoto additionally discloses that the actual current inventory
37 may not necessarily be in agreement with the difference found by
38 subtracting the used quantity from the initial inventory data but some

1 error due to breakage or the like is more or less inevitable. Therefore,
2 it is necessary to first correct all the inventory data at the beginning
3 processing. For the production plan data, production plan
4 modification transfer data and required quantity data, too, all the
5 initial values are reset for starting from zero. (col. 14, ll. 21-29).
6

7 From our review of Salvo, we make the following findings of facts:

8 20. The invention is related to inventory management systems and
9 methods. (col. 1, ll. 1-2).
10

11 21. [A] system and method for inventory management, in particular,
12 vendor-managed inventory, are provided. (col. 2, ll. 57-59).
13

14 22. The control unit analyzes the inventory amount signals and also
15 analyzes the amounts and inventory price information, and uses this
16 information to determine if an inventory order should be placed. (col. 3, ll.
17 5-7).
18

19 23. The inventory management system and method, as embodied by
20 the invention, permit monitoring and determining real-time inventory status
21 of one or more storage receptacles, such as silos at a manufacturing site,
22 automatic ordering of inventory to replenish the receptacles at a low price,
23 and purchasing the inventory at a lowest possible price. (col. 3, ll. 42-48).
24

25 24. The inventory monitoring also permits prediction of estimated
26 future inventory usage, lot identification, forecasting based on trends and
27 economic indicators, automatic notification of inventory occurrences that
28 require attention, and automation of inventory ordering. (col. 3, ll. 52-56).
29

30 25. The on-site storage areas and receptacles transmit their amount
31 signals to the site controller 112. Thus, the site controller 112 receives
32 inventory amount signals from each on-site storage device. The site
33 controller 112 forwards these signals over time to the control unit 114, as the
34 processor 102 forms articles from the inventory 150 and the amounts within
35 the receptacles 104 drop. Accordingly, the control unit 114 determines the

1 amount of inventory used over time, can estimate future use, and determine
2 if an inventory order is needed. (col. 5, ll. 1-10).

3
4 25. This vendor termination (for unsatisfactory performance) will
5 increase productivity and quality of the manufacturing site 103, since high
6 quality inventory will be properly controlled. (col. 11, ll. 14-17).

7
8
9 PRINCIPLES OF LAW

10 On appeal, Applicant bears the burden of showing that the Examiner
11 has not established a legally sufficient basis for combining the teachings of
12 Lencoski with those of Waechter. Applicant may sustain its burden by
13 showing that where the Examiner relies on a combination of disclosures, the
14 Examiner failed to provide sufficient evidence to show that one having
15 ordinary skill in the art would have done what Applicant did. *United States*
16 *v. Adams*, 383 U.S. 39 (1966); *In re Kahn*, 441 F.3d 977, 987-988, 78
17 USPQ2d 1329, 1336 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co.*
18 *Deutschland KG v. C.H. Patrick, Co.*, 464 F.3d 1356, 1360-1361, 80
19 USPQ2d 1641, 1645 (Fed. Cir. 2006). The mere fact that all the claimed
20 elements or steps appear in the prior art is not *per se* sufficient to establish
21 that it would have been obvious to combine those elements. *United States v.*
22 *Adams, supra*; *Smith Industries Medical systems, Inc. v. Vital Signs, Inc.*,
23 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420 (Fed. Cir. 1999).

24
25 ANALYSIS

26 We begin with claim 1. From fact 2 (of Hafner) we find reference to
27 at least one industry including retailers and suppliers. We find from the
28 disclosure of retailers and suppliers, that a retailer or supplier would not be

1 limited to having a single store, but would include plural stores.
2 Accordingly, we do not agree with Applicants (Br. 5) that "Hafner does not
3 disclose receiving data from a plurality of stores" or (Reply Br. 4) that
4 Hafner provides embodiments only for transactions between a single buyer
5 and a single supplier. Rather, we find that Hafner inherently teaches, or if
6 not, suggests a retailer or supplier having plural stores. However, from the
7 facts of Hafner, Applicant (Br. 5) correctly points out that Hafner does not
8 disclose adjusting a supply of raw materials, or the calculating or comparing
9 steps of claim 1. From fact 12 (of Yamamoto), we find that the system
10 relates to a raw materials ordering system. From facts 14 and 17 (of
11 Yamamoto) we find that the system uses Point of Sale (POS) terminals
12 which collect retail sales information and uses the collected information for
13 adjusting the forecast of raw materials needed. From the above descriptions
14 of Hafner and Yamamoto, we agree with the examiner (Final Rejection 3)
15 that an artisan would have been motivated to apply the description of
16 Yamamoto of ordering raw materials in response to received sales data, in
17 the inventory replenishment system of Hafner. Accordingly, we are not
18 persuaded by Applicants' assertion (Br. 5) that "Yamamoto makes up for
19 few of the deficiencies of Hafner." In addition, from fact 19 we find that
20 Yamamoto describes raw material in the actual and projected inventory,
21 which are the results of the amounts sold. From the disclosure of correcting
22 discrepancies of inventory, we find that Yamamoto suggests comparing raw
23 materials sold with predicted raw materials to indicate a level of
24 discrepancy, which is corrected.

1 Turning to Salvo, we find from fact 24 that control unit 114
2 determines the amount of inventory used over time, can estimate future use,
3 and can determine if an inventory order is necessary. The determining of the
4 remaining inventory in the storage unit, or silo, represents determining what
5 products have been sold. The estimating of future use involves estimating
6 what materials will be needed in the future, and the determining of an
7 inventory order is needed teaches ordering more materials for the silo.
8 Thus, we find that the reference to Salvo, combined with the descriptions of
9 Hafner and Yamamoto would have suggested calculating a predetermined
10 amount of raw materials for a given level of sales by the store, as advanced
11 by the Examiner.

12 As noted, supra, we find in Yamamoto a suggestion of comparing an
13 amount of raw materials sold to a store with the predicted amount of raw
14 materials for the given level of sales of goods, to thereby provide an
15 indication of a level of discrepancy. Because the inventory control system
16 of Yamamoto provides an indication of a level of discrepancy, we agree with
17 the Examiner that an artisan would have arrived at the claimed comparison
18 step. Thus, we find that the Examiner is correct in asserting that combining
19 the disclosures of the prior art would result in the invention of claim 1. On
20 the record before us, it follows that in this case that Applicants have failed to
21 show error on the part of the Examiner in rejecting claim 1 under § 103(a).
22 Since independent claims 6 and 11 contain similar language, the rejection of
23 claims 1, 6, and 11, and claims 2-5, 7-10, and 12-15, which depend
24 therefrom, is sustained.

1 Turning to independent claims 16-18, Applicant's arguments are
2 directed to claim 16. Accordingly, we select claim 16 as representative of
3 the group. As noted by Applicant (Reply Br. 5), claim 16 does not include
4 the comparison step, but rather recites

5 g) displaying an amount of raw materials
6 sold to a store on a same page or screen as a
7 recipe-predicted forecast for the raw materials
8 based on the amount of the goods sold by the store,
9 to thereby permit a comparison and determination
10 of variance due to errors or loss; and materials.

11 h) determining a percentage of cost of the
12 goods attributable to the raw materials.

13
14
15 We note that as we found, *supra*, with respect to claim 1, the prior art would
16 not have suggested a comparison and determination of variance due to
17 errors or loss. However, the comparison step is not present in claim 16. As
18 broadly drafted, claim 16 recites, *inter alia*, "to thereby permit a comparison
19"

20 From the disclosure of Salvo of determining the amount of inventory
21 used over a period of time, and the disclosure of Yamamoto of adjusting the
22 supply of raw materials based on sampled sales, we find that the references
23 would have suggested, a predicted forecast of raw materials based on the
24 amount of materials used sold. From facts 22 and 26 we find that
25 Yamamoto would have suggested a predicted forecast of raw materials
26 based on sales. We find that the term "recipe" fails to distinguish the claim
27 from the prior art because whatever format was used to create the estimated
28 use would have a recipe or formula for carrying out the estimation.

1 In addition, to display information obtained by the combined
2 teachings of the prior art, in a side-by-side fashion on a screen or page would
3 have been an obvious expedient to an artisan viewing the material. The
4 manner in which information already determined is displayed is within the
5 ordinary level of skill of an artisan, because an artisan would have been
6 aware that the information could be displayed either by printing it out or
7 displaying it on a screen.

8 Moreover, because the information has been obtained by the prior
9 art, an artisan would have been permitted to compare the information and
10 make determinations regarding it, even though there is no specific
11 disclosure of doing so, because claim 16 does not require comparing. We
12 are cognizant of the differences between claim 16 and the inventions
13 described in the prior art. However, these differences simply do not appear
14 in claim 16. In *ex parte* prosecution, there is no reason why Applicants
15 cannot amend the claim to distinguish over the prior art. As broadly drafted,
16 we find, for the reasons, *supra*, that claim 16 would have been suggested by
17 the prior art in a manner unintended by Applicants.

18 From all of the above, we conclude that the combined teachings and
19 suggestions of Hafner, Yamamoto and Salvo would have suggested the
20 language of claim 16. Accordingly, the rejection of claim 16, along with
21 claims 17 and 18 which fall with claim 16, is sustained.

22

23

CONCLUSION OF LAW

24

25

On the record before us, we find with respect to claims 1-18 that Applicants have failed to sustain their burden of establishing that that

1 Examiner's rejection is not supported by a legally sufficient basis for holding
2 that the claimed subject would have been obvious within the meaning of
3 § 103(a).

4
5
6

DECISION

7 The rejection of claims 1-18 under 35 U.S.C. § 103(a) affirmed.

8
9

AFFIRMED

10
11
12

13	TERRY J. OWENS)	
14	Administrative Patent Judge)	
15)	
16)	
17)	
18)	BOARD OF PATENT
19	STUART S. LEVY)	APPEALS
20	Administrative Patent Judge)	AND
21)	INTERFERENCES
22)	
23)	
24)	
25	ANTON W. FETTING)	
26	Administrative Patent Judge)	

Appeal 2006-2018
Application 09/815,731

1 FOLEY AND LARDNER LLP
2 SUITE 500
3 3000 K STREET NW
4 WASHINGTON, DC 20007

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33 SSL/jrg