



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/566,659	12/04/2006	Jamie Tooley	AEIC.002A2	6373
20995	7590	02/25/2013	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			THOMPSON, KENNETH L	
			ART UNIT	PAPER NUMBER
			3676	
			NOTIFICATION DATE	DELIVERY MODE
			02/25/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jayna.cartee@knobbe.com
efiling@knobbe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMIE TOOLEY

Appeal 2010-011483
Application 11/566,659
Technology Center 3600

Before MURRIEL E. CRAWFORD, BIBHU R. MOHANTY, and
JAMES A. TARTAL, *Administrative Patent Judges*.

TARTAL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Jamie Tooley (Appellant) seeks our review under 35 U.S.C § 134 of the Examiner's final decision rejecting claims 1-21. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b). Appellant's claimed invention relates to landfill gas control and monitoring systems and, more particularly, to systems and methods for optimizing production of landfill gas. Spec. [0002].

Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A computerized method of optimizing landfill gas extraction of a landfill gas extraction system positioned at a landfill site, the landfill gas extraction system comprising a plurality of wellheads positioned around the landfill configured to extract landfill gas from the landfill, wherein each of the wellheads comprises a flow valve configured to control an amount of flow through the wellhead into the landfill gas extraction system, the method comprising:

for each of a plurality of wellheads positioned around a landfill, receiving data regarding current characteristics of the wellheads and data indicating historical trends of the wellheads;

for each of the plurality of wellheads, determining a respective adjustment to a flow valve of the respective wellheads in order to optimize landfill gas extraction at the respective wellhead, wherein the determining is based on at least the current characteristics and the historical trends of the respective wellhead;

after determining adjustments to respective flow valve rates of each of the plurality of wellheads and prior to implementing the determined adjustments on the respective

¹ Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed Feb 11, 2010) and Reply Brief ("Reply Br.," filed Jul. 26, 2010), and the Examiner's Answer ("Ans.," mailed May 27, 2010, corrected Jul. 28, 2010).

wellheads, determining further adjustments to the flow valves of at least some of the wellheads in order to optimize a total landfill gas extraction of the landfill gas extraction system, wherein the further adjustments are determined to adjust the total landfill gas extraction towards a projected landfill gas extraction of the landfill, wherein the further adjustments indicate that flow to certain wellheads should be decreased below levels indicated by the respective determined adjustments for the certain wellheads and flow to other wellheads should be further increased above levels indicated by the respective determined adjustments for the other wellheads; and

transmitting indications of at least some of the determined adjustments and the further adjustments to a technician, wherein the adjustments and the further adjustments are physically implemented on the respective wellheads by the technician according to the indicated determined adjustments and further adjustments.

The Examiner relies upon the following evidence:

Hall	US 4,890,672	Jan. 2, 1990
Brookshire	US 2001/0005812 A1	Jun. 28, 2001

Claims 1-9 and 21 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1, 2, 10, and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hall.

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brookshire and Hall.

FINDINGS OF FACT

We find that the findings of fact which appear in the Analysis below are supported by at least a preponderance of the evidence. *Ethicon, Inc. v.*

Quigg, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

ANALYSIS

Non-statutory Subject Matter

Claims 1-9

Appellant argues claims 1-9 as a group (Reply Br. 7-9). We select claim 1 as the representative claim for this group, and the remaining claims 2-9 each stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

The preamble of claim 1 recites “[a] computerized method of optimizing landfill gas extraction.” We are not persuaded by Appellant’s argument that the claims require a “computerized method,” and therefore “more than steps which can be performed mentally.” Rep. Br. 9.

Whether a preamble statement that the “patent claims a method of or apparatus for...[x] is not merely a statement describing the invention's intended field of use ... [depends upon if] that statement is intimately meshed with the ensuing language in the claim.” *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1306 (Fed. Cir. 1999). After introduction of the term “computerized method” in the preamble, the claim fails to reference the term again and does not fully incorporate the term into the body of the claim so as to breathe life and breath into it. *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir.1989).

Moreover, “[i]n order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely

as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1333 (Fed. Cir. 2010). We find that the asserted “computerized method” fails to play a significant part in permitting the steps of the claimed method to be performed. The method steps in claim 1 consist essentially of mental steps and the recitation of “transmitting indications” is mere insignificant extra-solution activity rendering the claim to be directed to non-statutory subject matter.

Claim 21

We disagree with Appellant’s assertion that the recitation of a “computer system” in the preamble of claim 21, alone, is sufficient to satisfy the test for statutory subject matter. *See* Reply Br. 9-11. For the same reasons discussed above with respect to a “computerized method” recited in claim 1, we find that the reference to a “computer system” in the preamble of claim 21 is not a limitation to the claim.

Claim 21 further recites a system comprising a data collection module “to receive data,” an adjustment recommendation module “to determine adjustments,” and a notification module “to transmit adjustment data to a computing device of a technician.” The Specification states that “module” means “a software or hardware component.” Spec. [0030]. Accordingly, the claim is drawn only to three software modules which can be drawn to only a set of algorithms in this case and the rejection of record is sustained.

Anticipation by Hall

Claims 1 and 2

We are persuaded by Appellant’s argument that Hall does not expressly or inherently disclose “determining further adjustments to the flow valves of at least some of the wellheads in order to optimize a total landfill gas extraction of the landfill gas extraction system ... wherein the further adjustments indicate that flow to certain wellheads should be decreased below levels indicated by the respective determined adjustments for the certain wellheads.” Hall states that “adjustment valves are disposed to decrease the flow of withdrawn gas wells on the basis of a temperature increase indicated by the temperature meter of the relevant gas well.” Hall Col. 3, ll. 32-36. While Hall discloses adjusting the flow of a well based on information about that respective well, the Examiner has not shown that Hall discloses determining adjustments to optimize a total landfill gas extraction wherein those further adjustments require levels above or below the “levels indicated by the respective determined adjustments for the certain wellheads.” We therefore reverse the Examiner’s rejection of claim 1 as being anticipated by Hall, as well as the respective associated dependent claim 2.

Claims 10 and 11

We are not persuaded by Appellant’s argument that Hall fails to disclose “receiving historical data” regarding wellheads and determining adjustments of wellheads “based at least partly on one or more *historical trends* associated with the respective flow valves.” App. Br. 15. Hall expressly discloses that temperature data concerning wells “can be read at regular intervals,” that the measured temperature values “can be transferred

to a central location” and “can be recorded,” and that those values “can be utilized for manual or automatic control of the flow of gas from the gas well.” Hall Col. 3, ll. 7-17. We find no distinction between collecting, recording, and utilizing data as disclosed by Hall and the claimed use of “historical trends.”

We are further unpersuaded by Appellant’s argument that Hall fails to teach or suggest the combination of features in claim 10 “for the same reasons” Appellant raised with respect to claim 1 “where applicable.” App. Br. 15. An examination of independent claim 10 shows it recites limitations that are distinct from the limitations recited for independent claim 1. Unlike claim 1, claim 10 does not state that further adjustments require levels above or below the “levels indicated by the respective determined adjustments for the certain wellheads.” We are not in a position to speculate as to what arguments Appellant believes are applicable to both claims. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2008). Accordingly, Appellant has not overcome the Examiner’s determination that claim 10 is anticipated by Hall. Appellant offers no additional argument on dependent claim 11, which we therefore also find anticipated by Hall on the same grounds as discussed above.

Obviousness based on Brookshire and Hall

Claims 1-9

We are unpersuaded by Appellant’s argument that Brookshire “does not appear to include any determining of adjustments prior to actually making adjustments,” and “fails to teach or suggest determining such further

adjustments to certain wellheads, after initial adjustments for each of the wellheads have already been determined.” App. Br. 18-20. To the contrary, we agree with the Examiner that Brookshire “discloses subroutines requiring a host of predeterminations or further determinations required prior to making adjustments to the manual isolation valves.” Ans. 8. For example, Brookshire [0013] states that “the computer controls the control valve of each cell to maintain oxygen concentration below a predetermined oxygen concentration setpoint, while controlling the control valves such that the sum of the gas flow rates through all cells is maintained within a predetermined field flow rate.” Brookshire therefore effectively discloses determining gas flow rates through cells based on a characteristic of the wellhead, then determining further adjustments based on the field flow rate.

We also find unpersuasive Appellant’s argument that both Hall and Brookshire “fail to teach or suggest transmission of indications of adjustments and further adjustments.” App. Br. 19. The Appellant has not addressed the combination of prior art references as a whole but simply improperly argues the merits of Brookshire and Hall individually. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not . . . that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art”). As found by the Examiner, Brookshire discloses transmission of adjustments and further adjustments to an automatic valve control system and Hall discloses the manual adjustment of valves. Appellant has not overcome the Examiner’s determination that it would have been obvious to use a

technician to manually adjust the valves as disclosed by Hall in the control system disclosed by Brookshire.

Claims 10, 11, and 15-20

We are not persuaded by Appellant's contention that neither Brookshire nor Hall discloses "historical trends" or storage of historical characteristics of wellheads. *See* App. Br. 20-21. As discussed above, we find no distinction between collecting, recording, and utilizing data as disclosed by Hall and the claimed use of "historical trends" or "data regarding historical energy production." Appellant offers no additional argument on dependent claims 11 and 16-20, which we therefore also find unpatentable over Brookshire and Hall on the same grounds as discussed above.

Claims 12-14

We are not persuaded by Appellant's argument that Hall and Brookshire fail to teach or suggest "the use of historical data from wellheads and the determination of suggested adjustments to flow rates." *See* App. Br. 22. As discussed above, Appellant has not overcome the Examiner's determination that Hall discloses the use of historical data and that Brookshire discloses subroutines requiring a host of predeterminations or further determinations required prior to making adjustments to the manual isolation valves.

Claim 21

We are not persuaded by Appellant's argument that Hall and Brookshire fail to teach or suggest "any data that includes 'an indication of an order of adjusting the plurality of wellheads.'" *See* App. Br. 22. We agree with the Examiner that Brookshire discloses a computer system or

collection module “wherein the control module determines cell adjustments based on global flow rate which indicates priority to particular cell flow rates most out of proportion with its weighted factor.” Ans. 6. For example, Brookshire [0070] discloses adjusting control valves to cells that have “the highest methane content” or “the lowest methane content” in optimizing the operation of the system. Thus, Brookshire discloses an order of adjusting wellheads based on data concerning a characteristic of the wellheads.

CONCLUSIONS OF LAW

We conclude that Appellant has not overcome the Examiner’s rejection of claims 1-9 and 21 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

We further conclude that Appellant has overcome the Examiner’s rejection of claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Hall.

We further conclude that Appellant has not overcome the Examiner’s rejection of claims 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by Hall.

We further conclude that Appellant has not overcome the Examiner’s rejection of claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over Brookshire and Hall.

DECISION

We AFFIRM the decision of the Examiner to reject claims 1-21.

Appeal 2010-011483
Application 11/566,659

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED

Klh