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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/938,523	11/11/2015	Peter A. Torrione	HEL768/4-010US/58000	3705
22892	7590	06/11/2020	EXAMINER	
VINSON & ELKINS L.L.P. 1001 Fannin Street Suite 2500 HOUSTON, TX 77002-6760			TARKO, ASMAMAW G	
			ART UNIT	PAPER NUMBER
			2482	
			NOTIFICATION DATE	DELIVERY MODE
			06/11/2020	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PETER A. TORRIONE

Appeal 2019-002376
Application 14/938,523
Technology Center 2400

Before JOHN A. EVANS, CATHERINE SHIANG, and BETH Z. SHAW,
Administrative Patent Judges.

EVANS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the Examiner’s final rejection of Claims 1–16. Appeal Br. 4. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.²

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Covar Applied Technologies, Inc. Appeal Br. 2.

² Rather than reiterate the arguments of Appellant and the findings of the Examiner, we refer to the Appeal Brief (filed August 21, 2018, “Appeal Br.”), the Reply Brief (filed January 29, 2019, “Reply. Br.”), the Examiner’s Answer (mailed November 30, 2018, “Ans.”), the Final Action (mailed December 21, 2017, “Final Act.”), and the Specification (filed November 11, 2015, “Spec.”) for their respective details.

STATEMENT OF THE CASE

Invention

The claims relate to a system and method for estimating global rig state. *See Abstract.*

Claims

Claims 1 and 9 are independent. Claims App'x. An understanding of the invention can be derived from a reading of illustrative Claim 1 which is reproduced below with some formatting added:

1. A system for estimating global rig state comprising:
 - at least one camera operably connected to at least one processor, wherein said camera is capable of gathering visual data regarding at least one variable of rig state and said processor is capable of compiling rig state data, estimating global rig state, or both;
 - at least one sensor for measuring at least one variable related to global rig state wherein said sensor is operably connected to said processor; and
 - a model incorporating multiple variables related to rig state.

REFERENCES AND REJECTIONS

References

Name	Publication Number	Date
Millheim	US 4,794,534	Dec. 27, 1988
Clayton	US 2008/0162085 A1	July 3, 2008
Zheng	US 2009/0225630 A1	Sept. 10, 2009

1. *Rejections*³

Claims Rejected	35 U.S.C. §	References/Basis
1–7, 9, 10, 13, 15	102	Millheim, Final Act. 3–6.
8, 14, 16	103	Millheim, Zheng Final Act. 7–8.
11, 12	103	Millheim, Clayton Final Act. 9.

ANALYSIS

We have reviewed the rejections of Claims 1–16 in light of Appellant’s arguments that the Examiner erred. We are persuaded that Appellant identifies reversible error. We consider Appellant’s arguments *seriatim*, as they are presented in the Appeal Brief, pages 7–14; and in the Reply Brief, pages 1–6.

CLAIMS 1–7, 9, 10, 13, AND 15 ANTICIPATION BY MILLHEIM.

A processor capable of compiling rig state data.

Claim 1 recites, *inter alia*, “at least one camera operably connected to at least one processor wherein [. . .] said processor is capable of compiling rig state data, estimating global rig state, or both.”

³ The Application was examined under the pre-AIA first to invent provisions. Final Act. 2.

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The Examiner finds Millheim discloses at least one camera operably connected to a processor. Final Act. 3–4 (citing Millheim, col. 7, ll. 67–68). The Examiner finds the processor is capable of compiling rig state data and/or estimating global rig state. *Id.* at 4.

Appellant contends the cited passage of Millheim fails to disclose a camera operably-coupled to a computer which is capable of compiling rig state data. Appeal Br. 8. Appellant quotes Millheim:

The engineers at the monitoring facility 14 have a more thorough understanding of what is actually occurring at the well site because a plurality of cameras 34 are stationed around the well site. Such cameras 34 can be controlled from the well site or remotely from the monitoring facility 14 through a two-way video control unit 35, then through a full motion video or a freeze frame video controller 36, which connects to the multiplexer 31.

Appeal Br. 8 (quoting Millheim, col. 7, l. 64–col. 8, l. 4). Appellant argues, Millheim distinguishes drilling “data” from visual “information” and expressly treats these two categories distinctly:

the *data*, as well as audio and visual *information* is sent from the well site and is received through a cooperable two-way communication system. [...] The *data* is further sent to a database 26 associated with the main control and operations computer. [...] The audio, visual and graphical *information* is sent through a codec controller 53 and a video control unit 54 to a plurality of graphic and/or camera monitors 55.

Id. (quoting Millheim, col. 8, l. 67–col. 9, l. 13) (Appellant’s emphasis).

The Examiner’s Answer repeats, substantially-verbatim, the Final Action findings. *Compare* Ans. 11 vs. Final Act. 3–4.

Appellant contends Millheim discloses a system that allows the human engineers at the remote monitoring facility to be in audio and video communication with the drilling rig, similar to a traditional security system. Reply Br. 1. Appellant argues Millheim discloses both drilling data and audio/visual information are sent from the drilling rig to the monitoring facility, but that they are handled very differently at the monitoring facility, i.e., the drilling data that is sent to a database is distinct and separate from the audio/visual information that is instead sent to a monitor. *Id.* Appellant complains this key distinction is discussed in the Appeal Brief but is not addressed in the Examiner's Answer. *Id.* We agree with Appellant.

Millheim discloses: “[i]n the remote operations facility 20, the drilling data collected from the well is first reviewed and, if desired, preprocessed before transmission to the monitoring facility 14.” Millheim, col. 5, ll. 61–64. These well-site data are defined and described at column 6, line 55 through column 7, line 36. Millheim further discloses: “the data records are sent from the logging unit 18 in 400 ASCII byte records. Each record has up to 58 byte fields with each field containing 1 data value.” Millheim further discloses: “the remote operations facility 20 includes graphical, audio, and visual two-way communications equipment for communication with the engineers at the monitoring facility 14.” Millheim, col. 5, ll. 64–68.

Millheim discloses well data and video information are multiplexed together for transmission and subsequently are separated and analyzed

separately. The data is multiplexed together with the audio and visual information (*see* Millheim, col. 7, ll. 51–52) and is sent from the well site. Millheim, col. 8, ll. 66–68. The received data is sent through a (de)multiplexer whereupon the data is sent to a database associated with the main operations and control computer and the “audio, visual and graphical information is sent through a codec controller 53 and a video control unit 54 to a plurality of graphic and/or camera monitors 55.” Millheim, col. 9, ll. 4–13.

Claim 1 recites, *inter alia*, “at least one camera operably connected to at least one processor, wherein said camera is capable of gathering visual data regarding at least one variable of rig state and said processor is capable of compiling rig state data, estimating global rig state, or both.” The Examiner finds Millheim discloses at least one camera operably connected to a processor. Final Act. 3 (citing Millheim, col. 7, ll. 67–68). The cited (and immediately adjacent) passages disclose sending video signals through a two-way video control unit and then through full motion video or freeze-frame video controllers. Each such controller would have a processor as the Examiner finds. However, contrary to the Examiner, we find no indication that the processor of a video controller “is capable of compiling rig state data, estimating global rig state, or both,” as claimed.

“Collecting visual data corresponding with said sensor data.”

Claim 9 recites, *inter alia*, “collecting visual data corresponding with said sensor data.”

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Appellant contends “Millheim expressly teaches separating electronic drilling data (which is stored) from visual data (which is merely displayed).” Appeal Br. 9–10.

The Examiner finds Millheim discloses collecting visual information as real time drilling data for simulating future drilling actions. Ans. 12.

As argued by Appellant, and as discussed above, Millheim multiplexes for transmission, drilling data and visual data. However, Millheim further discloses the various data are demultiplexed whereupon the drilling data is stored and computer analyzed, but the visual data is merely displayed. Contrary to the Examiner, we find no disclosure in Millheim that visual data “is processed for simulating future drilling actions.” *See* Ans. 12.

In view of the foregoing, we decline to sustain the rejection of Claims 1–7, 9, 10, 13, and 15 under 35 U.S.C. § 102.

CLAIMS 8, 11, 12, 14, AND 16

OBVIOUSNESS OVER MILLHEIM, ZHENG, AND CLAYTON.

The Examiner does not apply the secondary art to teach the limitation as disputed above. In view of the foregoing, we decline to sustain the rejection of Claims 8, 11, 12, 14, and 16 under 35 U.S.C. § 103.

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CONCLUSION⁴

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-7, 9, 10, 13, 15	102	Millheim		1-7, 9, 10, 13, 15
8, 14, 16	103	Millheim, Zheng		8, 14, 16
11, 12	103	Millheim, Clayton		11, 12
Overall				1-16

REVERSED

⁴ Because we do not sustain the Examiner’s rejection for the reasons discussed herein, we need not address Appellant’s further arguments. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (finding an administrative agency is at liberty to reach a decision based on “a single dispositive issue”).