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Row 2: 71475, 7590, 09/29/2020, CNH Industrial America LLC, Intellectual Property Law Department, 700 STATE STREET, RACINE, WI 53404, EXAMINER WILLIAMS, KELLY D
Row 3: ART UNIT 3662, PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER A. FOSTER, JOHN H. POSSELIUS,
PAUL J. LEWIS, BRET TODD TURPIN, JEREMY ALEXANDER
HARRIS, JAMES BRIAN STEWART, MAX J. BARFUSS, JOSHUA
HILL HENRIE, DANIEL JOHN MORWOOD, and
BRANDON CHAMBERLAIN ADAMS

Appeal 2020-000513
Application 14/709,235
Technology Center 3600

Before JENNIFER D. BAHR, BENJAMIN D. M. WOOD, and
BRETT C. MARTIN, *Administrative Patent Judges*.

MARTIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner’s decision to reject claims 1, 2, 4–6, 9, 10, 12, and 15–20. *See*
Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

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 CNH Industrial
America LLC and Autonomous Solutions, Inc.. Appeal Br. 2.

We AFFIRM IN PART.

CLAIMED SUBJECT MATTER

The claims are directed “to agricultural systems and, more particularly, to a control system for autonomous vehicle within an agricultural system.” Spec. ¶ 1. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An electronic control system for an agricultural system, comprising a controller configured to:
 - receive a first signal indicative of a mission of a work vehicle of the agricultural system; determine a first desired path of travel of the work vehicle based on the mission;
 - output a second signal to the work vehicle indicative of the first desired path of travel;
 - receive a third signal indicative of a change event, wherein the change event comprises availability of a second work vehicle;
 - determine a response to the change event that facilitates completion of the mission; and
 - output a fourth signal indicative of the response to the work vehicle.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Birnie	US 2009/0118904 A1	May 7, 2009
Durkos	US 2009/0228166 A1	Sept. 10, 2009
Anderson	US 2010/0094499 A1	Apr. 15, 2010
Peterson	US 2011/0084851 A1	Apr. 14, 2011
Collins	US 2011/0196565 A1	Aug. 11, 2011
Burema	US 2014/0303814 A1	Oct. 9, 2014

REJECTIONS

Claims 1, 2, 4, 15, and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birnie and Anderson. Final Act. 2.

Claims 9 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birnie, Anderson, and Peterson. Final Act. 6.

Claims 5 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birnie, Anderson, and Burema. Final Act. 9.

Claim 12 stands rejected under 35 U.S.C. § 103 as being unpatentable over Birnie, Anderson, Peterson, and Burema. Final Act. 10.

Claims 6, 17, and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birnie, Anderson, and Collins. Final Act. 11.

Claim 16 stands rejected under 35 U.S.C. § 103 as being unpatentable over Birnie, Anderson, and Durkos. Final Act. 13.

OPINION

Obviousness

Appellant presents arguments for independent claims 1 and 15 together as well as for claim 9 separately. Appellant does not otherwise argue the dependent claims, relying merely on their dependence for patentability. We address each of independent claims 1, 9, and 15 *infra*, and the dependent claims stand or fall with their respective independent claims.

Claims 1 and 15

Appellant argues these claims as a group. We select claim 1 as representative and the remaining claims stand or fall with our disposition of claim 1. Appellant argues that the Examiner erred in the rejection because “*assigning an available work vehicle to resume a task of a failed vehicle is not receiving a signal indicative of a change event.*” Reply Br. 2. Appellant

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further contends that what Anderson actually teaches is not a change event indicative of the availability of a work vehicle, but merely reassigning tasks to compensate for a failed vehicle. Reply Br. 3.

Although we acknowledge that the Examiner is less than clear in the Answer in explaining the rejection, the Examiner makes clear in formulating the rejection that the claimed “third signal indicative of a change event” relates to vehicle failure and cites to Anderson ¶ 166. Final Act. 3–4. In Anderson, the vehicle failure is the change event and the claimed availability is actually the unavailability of the vehicle that has failed. We interpret the term “availability” to include whether or not a vehicle is available, not merely that a new vehicle is available, as Appellant appears to argue. *See, e.g.*, Reply Br. 2. In this manner, Anderson’s system does receive a third signal indicative of a change event, i.e., the vehicle failure, and then outputs a fourth signal to reassign the remaining vehicles to make up for the loss of the failed vehicle. As such, we are not persuaded of error in the Examiner’s rejection of claims 1 and 15.

Claim 9

As to claim 9, Appellant argues that “Peterson does not teach a path of travel returning from a second position (e.g., for adding product) to a first position, in which the path of travel facilitates completion of the mission *as the controllable device traverses the path of travel.*” Reply Br. 4. This is allegedly so because Peterson teaches deviating from an original, first path, using a second path to refill the vehicle, and then returning to the stopping point via a third path and resuming the first path to complete the mission. *Id.*

Appellant is correct that Peterson does not teach completion of the mission *as the vehicle traverses the third path.* The claims define the third

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path as “extend[ing] from the second position to the first position” where the second position is the refilling point and the first position is the stopping point where the vehicle stopped work and deviated from the first path to travel to the refilling point. In this regard, the claims require some work to be done *as* the vehicle traverses this third path. In Peterson, the vehicle traverses a second path to the refilling station, but the third path merely returns the vehicle in reverse on the second path to the stopping point, at which time the vehicle then resumes completion of the assigned work. In order for Peterson to meet the claim language at issue, it would need to teach a new path that routes the vehicle not in reverse along the second path where there is no work to be completed, but to a point on the field where it could resume work and then finish at the stopping point where it deviated from the first path to refill. Because no work is done in Peterson *as* the vehicle traverses the third path, we agree that the Examiner’s rejection is in error and do not sustain the rejection.

CONCLUSION

The Examiner’s rejections are **AFFIRMED IN PART**.

More specifically,

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 4, 15, 18	103	Birnie, Anderson	1, 2, 4, 15, 18	
9, 10	103	Birnie, Anderson, Peterson		9, 10
5, 20	103	Birnie, Anderson, Burema	5, 20	
12	103	Birnie, Anderson, Peterson, Burema		12
6, 17, 19		Birnie, Anderson, Collins	6, 17, 19	
16		Birnie, Anderson, Durkos	16	
Overall Outcome			1, 2, 4–6, 15–20	9, 10, 12

TIME PERIOD FOR RESPONSE

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).

AFFIRMED IN PART