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EXAMINER
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SRINIVAS BOLLAPRAGADA, VINAYAK TILAK, VINAYKANTH MUDIAM, and RAJEEV NAMBOOTHIRI

Appeal 2018-002629[1]
Application 14/492,226
Technology Center 3600

Before LISA M. GUIJT, LEE L. STEPINA, and PAUL J. KORNICZKY, *Administrative Patent Judges*.

STEPINA, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision to reject claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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[1] General Electric Company is the Appellant, and the Appeal Brief lists General Electric Company as the real party in interest. Appeal Br. 5.

CLAIMED SUBJECT MATTER

The claims are directed to a power assignment system and method for forming vehicle systems. Claim 9, reproduced below with emphasis added, is illustrative of the claimed subject matter:

> 9. A system comprising:
>
> one or more processors configured to determine a needed amount of power for propelling a vehicle system along a route during a trip from a first location to one or more destination locations, the one or more processors also configured to identify one or more propulsion-generating vehicles for inclusion in the vehicle system based on power capabilities of the one or more propulsion-generating vehicles, the power capabilities representative of amounts of power that the one or more propulsion-generating vehicles are calculated to be capable of providing,
>
> wherein the one or more processors also are configured to determine handling parameters of the vehicle system having a first group of the one or more propulsion-generating vehicles generating propulsive force to move the vehicle system along the route during the trip, and to repeat determining the handling parameters of the vehicle system with the vehicle system having one or more different groups of the one or more propulsion-generating vehicles generating the propulsive force to move the vehicle system along the route during the trip, and
>
> wherein *the one or more processors are configured to select the one or more propulsion-generating vehicles in at least one of the first group or the one or more different groups based on the handling parameters, the one or more propulsion-generating vehicles being selected for inclusion in the vehicle system during actual travel of the vehicle system along the route during the trip*.

Appeal Br. 35 (Claims App.).

REFERENCES RELIED ON BY THE EXAMINER

Daum	US 2010/0262321 A1	Oct. 14, 2010
Cooper	US 2013/0006451 A1	Jan. 3, 2013

REJECTIONS

I. Claims 1, 2, 7, 9, 10, 15, 17, and 18 are rejected under 35 U.S.C. § 102(a)(1) as anticipated by Cooper.

II. Claims 3–6, 8, 11–14, 16, 19, and 20 are rejected under 35 U.S.C. § 103 as unpatentable over Cooper and Daum.

OPINION

Rejection I, Cooper

Claims 9, 10, and 15

Appellant focuses its initial arguments on independent claim 9 (Appeal Br. 13–18), and we address our initial analysis to these arguments. In determining that Cooper discloses all the elements recited in claim 9, the Examiner finds that paragraph 52 and Figure 1 of Cooper teach that one or more processors of the system in Cooper "are configured to select the one or more propulsion-generating vehicles . . . for inclusion in the vehicle system during actual travel of the vehicle system along the route during the trip." Non-Final Act. 8. Specifically, the Examiner finds "Cooper discloses an energy management system that identifies *which vehicles to power on and which vehicles to power off*." *Id.* at 3. Thus, the Examiner equates the powering on or off of a vehicle with including or excluding the vehicle in the vehicle system.

Appellant contends that all of the vehicles that Cooper selects for turning on or off are already in the system described by Cooper, and, therefore, Cooper does not select vehicles for inclusion as recited. *See* Non-Final Act. 16–17. In other words, according to Appellant, the function of "selecting . . . for inclusion in the system" in claim 9 is not met by the step of selecting vehicles to be turned on or off. Instead, this limitation requires the vehicles to be selected to be physically included, or not, in the system.

In response, the Examiner states, "the [E]xaminer interprets the 'inclusion' of vehicles to mean which vehicles to turn on/off (include) while traversing a route." Ans. 4. The Examiner further states, "Applicant does not claim that the consist[2] is in the process of being built and not already built" and "[t]he concept of inclusion in the consist before the train even takes off along the route is not mentioned in the claims." *Id.* at 5.

In reply, Appellant notes that claim 9 recites selecting (or a processor configured to select) vehicles for inclusion in the vehicle system during actual travel of the vehicle system. Reply Br. 4–6. Thus, Appellant reiterates, selecting vehicles to be turned on/off does not qualify as selecting vehicles for inclusion. *See id.*

Appellant's argument is persuasive. We agree that the plain language of claim 9 means that the one or more processors select (choose) vehicles for physical inclusion to travel from the first location to the destination.

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[2] Cooper defines the term "consist" as follows: "[t]he remote powered units may be organized in motive power groups referred to as consists." Cooper ¶ 5. Appellant's Specification describes a "consist" as "two or more propulsion-generating vehicles . . . that are directly mechanically coupled to each other, such as by couplers connected to the adjacent vehicles." Spec. ¶ 36.

Appellant's Specification is consistent with this interpretation. For example, paragraph 14 of the Specification indicates that various vehicle yards may be contacted to determine whether inbound propulsion-generating vehicles "should be included in the vehicle system for the upcoming trip." The implication of including the inbound vehicle in the vehicle system for the upcoming trip is that the physical presence of the vehicle is the critical characteristic. Paragraph 20 of the Specification implies the same thing, stating, "after the vehicle system arrives at another vehicle yard during the trip, the power assignment system 100 may identify one or more other propulsion-generating vehicles to be included in the vehicle system, in place of and/or in addition to the propulsion-generating vehicles in the vehicle system."

Additionally, the Examiner's interpretation of the phrase "inclusion in the vehicle system" as meaning "turning a vehicle on" would require that a vehicle physically coupled to other vehicles (such as a locomotive coupled to other train cars) would not be in the vehicle "system" if it were not turned on. In other words, the Examiner's interpretation defines the system as *only* the vehicles that are turned on. This interpretation is inconsistent with the Specification, which states, "[e]mbodiments of the subject matter disclosed herein relate to determining which propulsion-generating vehicles are to be included in a vehicle system formed from one or more of the propulsion-generating vehicles *and optionally one or more non-propulsion-generating vehicles*." Spec. ¶ 1 (emphasis added). As there is no indication that non-propulsion-generating vehicles can be turned on, the Examiner's interpretation of the phrase "being selected for inclusion in the vehicle system" is unreasonably broad. This overly broad claim interpretation led

the Examiner's incorrect finding that all the elements of claim 9 are taught by Cooper. Accordingly, we do not sustain the rejection of claim 9, and claims 10 and 15 depending therefrom, as anticipated by Cooper.

Claims 1, 2, 7, 17, and 18

Independent claims 1 and 17 recite substantially similar requirements to those discussed above regarding the rejection of claim 9 (*see* Appeal Br. 33, 37 (Claims App.)), and the Examiner relies on the same interpretation of the phrase "for inclusion" in the rejection of these claims (*see* Non-Final Act. 9). Accordingly, for the same reasons discussed above regarding the rejection of claim 9, we do not sustain the rejection of claims 1 and 17 and associated dependent claims 2, 7, and 18.

Rejection II, Cooper and Daum

The Examiner's unreasonably broad claim interpretation discussed above regarding Rejection I is maintained in Rejection II. *See* Non-Final Act. 12–14. Accordingly, we do not sustain the rejection of claims 3–6, 8, 11–14, 16, 19, and 20 as unpatentable over Cooper and Daum.

DECISION

I. We reverse the rejection of claims 1, 2, 7, 9, 10, 15, 17, and 18 as anticipated by Cooper.

II. We reverse the rejection of claims 3–6, 8, 11–14, 16, 19, and 20 as unpatentable over Cooper and Daum.

REVERSED