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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* BUDDY GEORGE KARAKY, WESTON MCARTOR,  
GREGORY SCOTT MOSELEY, MATTHEW JOHN PETERS,  
GUY V. WORZEL SR., and STEVEN R. SHARKEY

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Appeal 2014-009922<sup>1</sup>  
Application 13/038,306<sup>2</sup>  
Technology Center 3600

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Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and  
TARA L. HUTCHINGS, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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<sup>1</sup> Our decision references Appellants' Appeal Brief ("Br.," filed May 12, 2014) and the Examiner's Answer ("Ans.," mailed July 2, 2014) and Final Office Action ("Final Act.," mailed November 4, 2013).

<sup>2</sup> Appellants identify Business Equipment Information Services, Inc. as the real party in interest. Br. 4.

## CLAIMED INVENTION

Appellants' claimed invention relates to "a computerized method for optimally assigning service territories to a service technician" (Spec. ¶ 3).

Claims 1 and 16 are the independent claims on appeal. Claim 1, reproduced below, is illustrative:

1. A computerized method for optimally assigning service territories to a service technician comprising:

providing access to a database stored on computer readable media by a computer system, said database containing geographic location data, unit type data, historical usage data, and historical repair data for each serviceable unit of a plurality of serviceable units, said database further containing historical repair success data and historical repair time data for each service technician of a plurality of service technicians;

selecting by said computer system a territory geographic area of interest;

selecting by said computer system a subset of serviceable units from said plurality of serviceable units stored in said database such that said subset of serviceable units contains serviceable units of said plurality of serviceable units that have said geographic location data located within said territory geographic area of interest;

selecting by said computer system a service technician from said plurality of service technicians stored in said database;

calculating by said computer system an aggregated technician demand time as a function of said unit type data of said selected subset of serviceable units, said historical usage data for each serviceable unit of said selected subset of serviceable units, said historical repair data for each serviceable unit of said selected subset of serviceable units, said historical repair success data for said selected service technician, and said historical repair time data for said service technician stored in said database;

recalculating said aggregated technician demand time by said computer system dynamically if characteristics of said territory geographic area of interest change; and

displaying results of said calculations and said recalculations dynamically as said calculations and said recalculations are performed to a user.

### REJECTIONS

Claims 1–4, 9, and 14–20 are rejected under 35 U.S.C. § 103(a) as unpatentable over Zhong (US 7,840,319 B2, iss. Nov. 23, 2010) and Bernard (US 2009/0319572 A1, pub. Dec. 24, 2009).

Claims 5 and 10 are rejected under 35 U.S.C. § 103(a) as unpatentable over Zhong, Bernard, and Wilson (US 7,464,046 B2, iss. Dec. 9, 2008).

Claims 6–8 and 11–13 rejected under 35 U.S.C. § 103(a) as unpatentable over Zhong, Bernard, and Glovitz (US 5,682,421, iss. Oct. 28, 1997).

### ANALYSIS

#### *Independent Claim 1 and Dependent Claims 2–4, 9, 14, and 15*

We are persuaded by Appellants' argument that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 103(a) at least because neither Zhong nor Bernard, individually or in combination, discloses or suggests

calculating by said computer system an aggregated technician demand time as a function of said unit type data of said selected subset of serviceable units, said historical usage data for each serviceable unit of said selected subset of serviceable units, said historical repair data for each serviceable unit of said selected subset of serviceable units, said historical repair success data for said selected service technician, and said historical repair time data for said service technician stored in said database[,]

as recited in claim 1 (Br. 18–24).

In rejecting claim 1 under § 103(a), the Examiner takes the position that Zhong discloses substantially all of the limitations of claim 1 (Final Act. 8–10). The Examiner concedes that Zhong “does not teach that the service of his disclosure is a repair service” (*id.* at 10). But the Examiner asserts that “the types of algorithms disclosed by **Zhong** are applicable to assigning repair technicians to repair service routes/territories based on historical information as evidenced for example in the analogous teachings of **Bernard**” (*id.* at 10–11 (citing Bernard ¶¶ 14, 20)). And the Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time of Appellants’ invention “to include [in] the invention of **Zhong** the repair data as taught by **Bernard**” because the claimed invention is merely a combination of old elements with each element performing the same function in the combination as it did separately (*id.* at 11).<sup>3</sup>

Zhong is directed to a delivery route planning system and method for routing courier/delivery drivers (*see, e.g.,* Zhong, Abstract; col. 37, ll. 25–41), and discloses that daily delivery routes are created for drivers based on customer participation and the demand volume for the day (*see, e.g., id.* at col. 2, ll. 5–15; col. 6, ll. 26–36). The claimed invention, on the other hand, as recited in claim 1, is directed to a method for optimally assigning

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<sup>3</sup> Bernard is directed to a system and method for managing field service, and discloses that field technicians are equipped with service tracking devices that provide information about equipment for which a service call is placed (Bernard ¶ 14). The tracking devices may accept indications regarding the status of tasks associated with the service call and record indications of service task milestones (*id.*) and also may compute or download a service call route based on various factors, including traffic conditions, and rearrange the itinerary or add or drop service calls, e.g., in response to instructions from a field service manager (*id.* ¶ 20).

service technicians, who work on serviceable units (e.g., equipment, devices, apparatuses, etc.), to service territories.

In finding that Zhong discloses substantially all of the limitations of claim 1, the Examiner draws various parallels between the features of the Zhong system/method and the claim limitations, as set forth in claim 1. However, we agree with Appellants that, in doing so, the Examiner makes “apples to oranges” comparisons (Br. 19). For example, the Examiner takes the position that a “serviceable unit” (which, in the context of claim 1, refers to a device, system, or apparatus to be repaired by the service technician) is equivalent to a customer stop, i.e., a street address, in the context of Zhong’s delivery service, and that the type of Zhong stop, e.g., residential or commercial, is the equivalent of the claimed “unit type” (*see* Final Act. 4, 6).

The Examiner further equates Zhong’s frequency data, i.e., the frequency of the driver’s visits to a particular customer (*see* Zhong, col. 2, ll. 43–46) to the claimed “historical usage data for each serviceable unit” (Final Act. 9); Zhong’s disclosure of the service volume of a particular geographic area (*see* Zhong, col. 2, ll. 38–40) to the claimed “historical repair data for each serviceable unit” (Final Act. 9); the driver’s familiarity with the geographic area (*see* Zhong, col. 1, ll. 38–39; col. 8, ll. 17–20) to the claimed “historical repair success data for said selected service technician” (Final Act. 9; *see also* Ans. 15–16); and the time required to complete the workload in the geographic area (*see* Zhong, col. 8, ll. 20–25) to the claimed “historical repair time data” (Final Act. 9).

The Examiner maintains that Zhong discloses “calculating . . . an aggregated technician demand time” as a function of these variables (*id.* at 9–10). Yet the calculation to which the Examiner refers, involves the

identification of an optimal delivery route (*see id.* at 10 (citing Zhong, col. 7, ll. 15–18; col. 15, ll. 56–65 (as disclosing “recalculating said aggregated technician demand time”))), not “an aggregated technician demand time,” as recited in claim 1.<sup>4</sup>

In view of the foregoing, we do not sustain the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the rejection of dependent claims 2–4, 9, 14, and 15. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“dependent claims are nonobvious if the independent claims from which they depend are nonobvious”).

*Independent Claim 16 and Dependent Claims 17–20*

Independent claim 16 includes language substantially similar to the language of claim 1, and stands rejected based on the same rationale applied with respect to claim 1 (Final Act. 11). Therefore, we do not sustain the Examiner’s rejection under 35 U.S.C. § 103(a) of independent claim 16, and claims 17–20, which depend therefrom, for the same reasons set forth above with respect to claim 1.

*Dependent Claims 5–8 and 10–13*

Claims 5–8 and 10–13 depend, directly or indirectly, from independent claim 1. The Examiner’s rejections of these dependent claims do not cure the deficiency in the Examiner’s rejection of claim 1. Therefore, we do not sustain the Examiner’s rejections of claims 5–8 and 10–13 under

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<sup>4</sup> The “aggregated technician demand time” is generally described in the Specification as the anticipated time demand on the service technician to service the aggregated serviceable units located in the geographic area of interest. *See Spec.* ¶ 35

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35 U.S.C. § 103(a) for the same reasons set forth above with respect to claim 1.

**DECISION**

The Examiner's rejections of claims 1–20 under 35 U.S.C. § 103(a) are reversed.

**REVERSED**