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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ABHISHEK NAGPAL and MANAH M. KHALIL

Appeal 2019-002779
Application 14/465,256
Technology Center 2600

Before JEAN R. HOMERE, CARL W. WHITEHEAD JR, and
JEREMY CURCURI, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE¹

Pursuant to 35 U.S.C. § 134(a), Appellant appeals from the Examiner’s decision to reject claims 1, 4–7, 9–11, 14–18, and 21–27, which constitute all of the claims pending in this appeal.² Appeal Br. 2. Claims 2,

¹ We refer to the Specification, filed Aug. 21, 2014 (“Spec.”); the Final Office Action, mailed Jan. 25, 2018 (“Final Act.”); the Appeal Brief, filed July 24, 2018 (“Appeal Br.”); the Examiner’s Answer, mailed Jan. 2, 2019 (“Ans.”); and the Reply Brief, filed Feb. 22, 2019 (“Reply Br.”).

² We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Verizon Communications Inc. as the real party in interest. Appeal Br. 2.

3, 8, 12, 13, 19, and 20 have been cancelled. *Id.* at 16, Claims App. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

II. CLAIMED SUBJECT MATTER

According to Appellant, the claimed subject matter relates to a telephony method and system for routing incoming calls to representatives best suited to handle each call. Spec. ¶ 1. As depicted in Figure 1 below, at an initial time, telephony system (105) collects for each representative (106) call handling production data (e.g., call handling stats, skill level/type, schedule, workload) (117) along with call handling rules (116). *Id.* ¶¶ 21–28. Upon receiving an incoming call, simulation manager (103) obtains and evaluates the production data and rules to route the call to the most suitable representative (106). *Id.*

Figure 1A, discussed above and reproduced below, is useful for understanding the claimed subject matter:

FIG. 1A
100

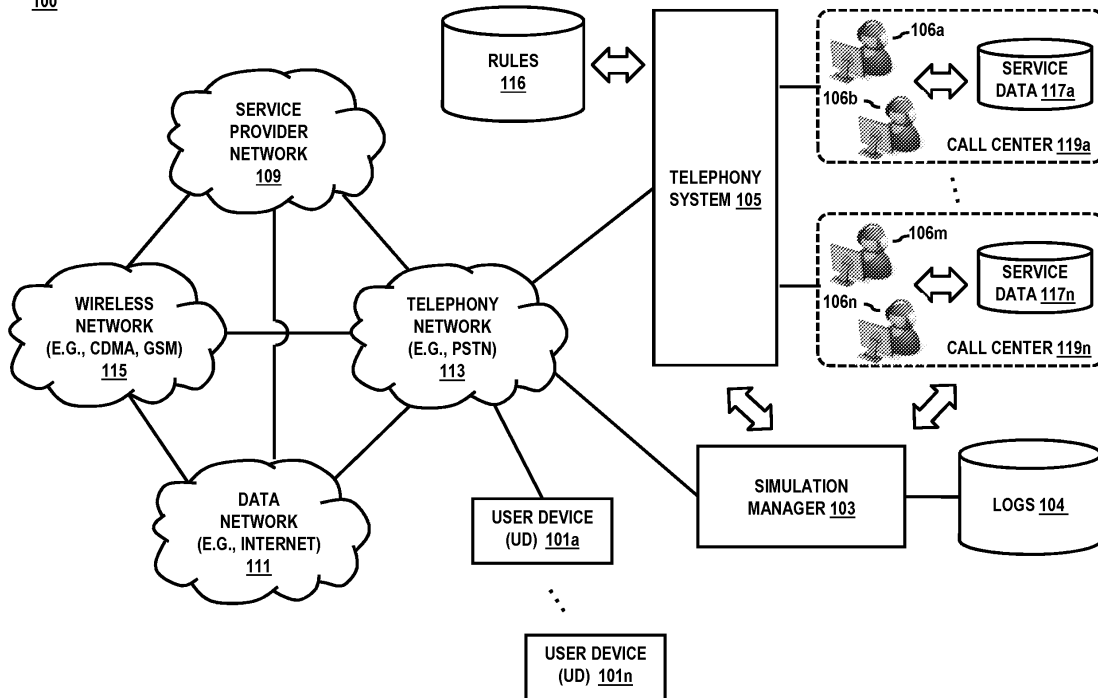


Figure 1A illustrates a system for simulating a telephony system evaluating rules employed for assigning inbound calls to best suited representatives. Spec. ¶ 5.

Illustrative Claim

Claims 1, 11, and 18 are independent. Claim 1, reproduced below with disputed limitations emphasized in *italics*, is illustrative of the claimed subject matter:

A method comprising:
receiving call production data relating to inbound calls for a telephony system and representative production data that includes actions taken by representatives in response to receipt of the inbound calls in the telephony system, the call production data and the representative production data being generated by the telephony system during a production run for directing the inbound calls to the representatives, the operation of the telephony system including using call handling rules that specify how the inbound calls are to be routed to the representatives;

executing a simulated telephony system to simulate processing of at least a portion of the inbound calls based, at least in part, on the call production data, the representative production data, and the call handling rules, the execution of the simulated telephony system including:

generating an expected call handling response of the telephony system due to one or more inbound calls and a change associated with the representatives, wherein the change associated with the representatives is determined based on schedules of the representatives and includes changes in skill levels and skill types, of active representatives,

wherein the skill levels and skill types are obtained from profiles corresponding to the representatives, and

wherein the skill levels are determined for a particular representative based on historical call handling statistics of the particular representative over a period of time and for a particular skill type, the historical call handling statistics including a total number of calls handled by the particular representative, an average call duration for the particular representative, and an average number of call transfers performed by the particular representative;

refining the call handling rules based on the execution of the simulated telephony system and the expected call handling response of the telephone system; and

updating the call handling rules, for the telephony system, to the refined version of the call handling rules,

wherein executing the simulated telephony system further includes:

initiating the execution of the simulated telephony system at the determined time of receipt,

wherein the time of receipt is different than an initial time of recording of the call production data, the representative production data, or a combination thereof.

III. REFERENCES RELIED UPON

The Examiner relies upon the following references.³

Name	Number	Publ'd/Issued
Crockett	US 6,044,355	Mar. 28, 2000
Fisher	US 6,049,547	Apr. 11, 2000
Guerrero	US 2012/0087486 A1	Apr. 12, 2012
Peloski	US 2014/0046638 A1	Feb. 13, 2014
Leta	US 2014/0185790 A1	July 3, 2014

IV. REJECTIONS

The Examiner rejects claims 1, 4–7, 9–11, 14–18, and 21–27, as follows:

1. Claims 1, 4, 5, 7, 9–11, 14, 15, 17, 18, and 21–27 stand rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Crockett, Guerrero, Leta, and Peloski⁴. Final Act. 2–11, 13–15, Ans. 14.⁵
2. Claims 6 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Crockett, Guerrero, Leta, Peloski, and Fisher. Final Act. 11–12.⁶

³ All reference citations are to the first named inventor only.

⁴ Subsequent to Appellant's rewriting claim 1 to incorporate the limitations of canceled claim 8 therein, the Examiner modifies the rejection to include Peloski to the combination. Ans. 14.

⁵ The Examiner includes claim 27 as part of this combination of references. *Id.* at 16.

⁶ *Id.* at 14.

V. ANALYSIS

We consider Appellant’s arguments *seriatim*, as they are presented in the Appeal Brief, pages 9–14 and the Reply Brief, pages 2–5.⁷ We are unpersuaded by Appellant’s contentions. Except as otherwise indicated herein below, we adopt as our own the findings and reasons set forth in the Final Action, and the Examiner’s Answer in response to Appellant’s Appeal Brief. Final Act. 3–17; Ans. 3–17. However, we highlight and address specific arguments and findings for emphasis as follows.

Claim 1

Regarding the rejection of claim 1, Appellant argues the Examiner’s proposed combination of Crockett, Guerrero, Leta, and Peloski does not teach or suggest “initiating the execution of the simulated telephony system at the determined time of receipt, wherein the time of receipt is different than an initial time of recording of the call production data, the representative production data, or a combination thereof.” Appeal Br. 9–10. In particular, Appellant argues Peloski’s disclosure of monitoring and controlling contact centers with dynamic temporal dimension and maintaining a simulated contact center using virtualized time system does not teach the disputed claim limitations. *Id.* at 10–11 (citing Peloski ¶¶ 71, 72). According to Appellant, Peloski’s disclosure of pausing or unpausing a simulation does not teach initiating an execution of a simulated telephony system at any particular time, let alone the time of receipt of an inbound call.

⁷ We have considered in this Decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made but chose not to make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2012).

Id. at 11. Appellant’s arguments are not persuasive of reversible Examiner error because they are not responsive to the rejections at hand.

As noted above, the Examiner relies upon the combination of Crockett, Guerrero, Leta, and Peloski to reject claim 1 including the disputed claim limitations. In particular, one cannot show non-obviousness by attacking the references individually where the rejections are based on combinations of references. *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986); *see also In re Keller*, 642 F.2d 413, 425 (CCPA 1981). In this case, the Examiner relies upon Crockett to teach executing a simulation including time receipt of inbound calls. Ans. 14, 15 (citing Crockett 6:7–67, 7:60–67). Further, the Examiner relies Peloski’s time warped simulation by a cell center simulator to process incoming calls in the order they were stored in an event queue. *Id.* at 15 (citing Peloski ¶¶ 71, 72). We find the Examiner’s proposed combination of the cited teachings of Crockett, Guerrero, Leta, and Peloski is no more than a simple arrangement of old elements with each performing the same function it had been known to perform, yielding no more than what one would expect from such an arrangement. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). Therefore, the ordinarily skilled artisan, being “a person of ordinary creativity, not an automaton,” would have been able to fit the teachings of the cited references together like pieces of a puzzle to predictably result in simulation subsequently processing inbound calls in the order they were initially stored in an event queue to thereby assign each call to the best suited representative. *Id.* at 420–21. Because Appellant has not demonstrated that the Examiner’s proffered combination would have been “uniquely challenging or difficult for one of ordinary skill in the art,” we

agree with the Examiner that the proposed modification would have been within the purview of the ordinarily skilled artisan. *See Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418). Consequently, we are satisfied that, on the record before us, the Examiner has established by a preponderance of the evidence that the combination of Crockett, Guerrero, Leta, and Peloski teaches the claimed subject matter. Because we are not persuaded of Examiner error, we sustain the Examiner's rejection of claim 1 as being unpatentable over the combination of Crockett, Guerrero, Leta, and Peloski.

Regarding the rejection of claim 9, Appellant argues that although Peloski's "time warp daemon" controls the virtual time clock during the normal course of the simulation, it does not teach or suggest fast forwarding of the execution of the simulation. Appeal Br. 13, 14. For this same reason, Appellant argues that Peloski does not teach the limitations of claim 10. *Id.* These arguments are unpersuasive. We agree with the Examiner that because Peloski's time warp daemon controls the virtual clock during the normal course of simulation, and causes each upcoming event in the queue to be processed in turn, such a mechanism teaches fast forwarding (i.e. advancing to a next event) execution of the simulation. Ans. 16–17. Accordingly, we are not persuaded of error in the Examiner's patent rejection of claims 9 and 10. For the foregoing reasons, we sustain the Examiner's obviousness rejection of claims 9 and 10.

Regarding the rejection of claims 4–7, 11, 14–18, and 21–27, Appellant has not presented separate patentability arguments or has reiterated substantially the same arguments as those previously discussed for

the patentability of claim 1. As such, claims 1, 4–7, 11, 14–18, and 21–27 fall therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

VI. CONCLUSION

For the above reasons, we affirm the Examiner’s rejections of claims 1, 4–7, 9–11, 14–18, and 21–27.

VII. DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	References s	Affirmed	Reversed
1, 4, 5, 7, 9–11, 14, 15, 17, 18, 21–27	103	Crockett, Guerrero, Leta, Peloski	1, 4, 5, 7, 9–11, 14, 15, 17, 18, 21–27	
6, 16	103	Crockett, Guerrero, Leta, Peloski, Fisher	6, 16	
Overall Outcome			1, 4–7, 9–11, 14–18, 21–27	

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

AFFIRMED