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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CRISTIAN DUROIU,
JAYA PRAKASH SUBRAMANIAM GANASAN,
VINOD CHAMARTY, MARK MICHAEL SCHAFFER,
JOSHUA HIRSCH STUBBS,
ROBERT NICHOLSON GIBSON, KRIS TIRI,
MOINUL KHAN, BOHUSLAV RYCHLIK,
SERAG GADELRAB, and SIMON BOOTH

Appeal 2017-011648
Application 14/706,203¹
Technology Center 2100

Before THU A. DANG, JENNIFER S. BISK, and NORMAN H. BEAMER,
Administrative Patent Judges.

BISK, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 24, and 27–59. We have jurisdiction under 35 U.S.C. § 6(b).

¹ Appellants identify the real party in interest as Qualcomm Incorporated.
App. Br. 2.

We reverse. The decision does not address any issue concerning subject matter eligibility.

BACKGROUND²

Appellants' invention relates to “arbitrating bus transactions on a communications bus based on bus device health information and providing power management for the communications bus.” Spec. ¶ 7. The Specification describes a bus interconnect with a book keeping element (“BKE”) that monitors the performance of master devices on the bus using a “service contract,” which specifies thresholds representing some quality of service parameter (for example bandwidth or latency) for each master device. *Id.* ¶¶ 13, 31–35. According to the Specification, the BKE compares the monitored performance of each master device to the service contract and assigns a “health status” to that device based on how often the service contract parameters are actually being met. *Id.* at ¶¶ 35–46. The health status information may then be used to arbitrate bus transactions among the plurality of master devices by reordering or queueing bus transaction commands. *Id.* ¶ 33.

Claim 24, reproduced below, is illustrative of the claimed subject matter:

24. A book keeping element configured to:
 - determine a service contract for a master device;
 - compare a service performance of bus transactions from the master device arbitrated on a bus interconnect to the service contract for the master device; and

² Throughout this Decision we have considered the Specification filed May 7, 2015 (“Spec.”), the Final Rejection mailed October 6, 2016 (“Final Act.”), the Appeal Brief filed March 9, 2017 (“App. Br.”), and the Examiner’s Answer mailed June 27, 2017 (“Ans.”).

derive health information for the master device based on the comparison of the service performance of the bus transactions to the service contract for the master device, wherein the health information indicates a percentage of the bus transactions from the master device that met the service contract.

App. Br. 12 (Claims Appendix).

REJECTIONS

The Examiner rejected claims 24 and 27–59 under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US 7,577,780 B2; Aug. 18, 2009) in view of Tardleux et al. (US 2010/0115167 A1; May 6, 2010).

ANALYSIS

We have considered all of Appellants’ arguments and any evidence presented. We highlight and address specific findings and arguments for emphasis in our analysis below.

Claims 24, 46, and 47

The Examiner rejects independent claims 24, 46, and 47 over a combination of Huang and Tardieux. Final Act. 2–3, 11–13. Appellants argue all three claims together. App. Br. 5–8. We focus on claim 24 as representative.

The Examiner relies on Tardleux for the last limitation of claim 24: “derive health information for the master device based on the comparison of the service performance of the bus transactions to the service contract for the master device, wherein the health information indicates a percentage of the bus transactions from the master device that met the service contract.” Final Act. 3 (citing Tardleux ¶¶ 8–11). According to the Examiner, Tardleux discloses “monitor units 16 that continuously monitor the bandwidths of the masters 14 with a moving window of time” and “compare unit 18 [, which] compares the measured bus usage . . . with a usage threshold.” *Id.* at 20

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(citing Tardieux ¶¶ 36–43). The Examiner additionally notes that “[e]ach master 14 [is] allocated a certain amount of usage of the shared bus,” for example, “masters 14a, 14b, and 14c may be allocated 50%, 30%, and 20% respectively.” *Id.*

Appellants argue that Tardieux does not disclose or suggest “wherein the health information indicates a percentage of the bus transactions from the master device that met the service contract” as required by the independent claims. App. Br. 6. According to Appellants, “the cited portions of Tardieux make no mention of deriving or relying on ‘health information’” and “only appear[] to track the ‘percentage of the bus bandwidth allocated to a corresponding master’ (i.e., the ‘bandwidth threshold’), and whether ‘usage of a shared bus’ is above or below the ‘bandwidth threshold.’” *Id.* at 7.

We agree with Appellants. Although Tardieux describes equivalent functionality to the claimed “service contract” and “health information,” the Examiner does not point to any portion of Tardieux that describes “health information indicates a percentage of the bus transactions from the master device that met the service contract.” Tardieux ¶¶ 11–12, 36–37 (describing predefined thresholds corresponding to each master device, which are equivalent to a “service contract” and feedback information based on monitoring of actual use of the bus by master devices compared to the predefined thresholds, which is equivalent to “health information”). As discussed above, the Examiner points to a series of percentages discussed in Tardieux, but those percentages do not “indicate a percentage of bus transactions from the master device that met the service contract.” Final Act. 20; Reply 23. Instead, those percentages indicate “a certain amount of usage of the shared bus” by each particular master device. *Id.* ¶ 43 (“Each

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master may be allocated a certain amount of usage of the shared bus 12. For example, masters 14a, 14b, and 14c may be allocated 50%, 30%, and 20%, respectively, of the bandwidth of the shared bus 12.”).

For these reasons, we do not sustain the Examiner’s rejection of claims 24, 46, and 47. Because dependent claims 27–45 and 48–59 depend, either directly or indirectly, from claims 24 and 47, their rejections suffer the same problems as the rejections of the independent claims.

CONCLUSIONS

We conclude Appellants have demonstrated the Examiner erred in rejecting claims 24 and 27–59 under 35 U.S.C. § 103.

DECISION

We reverse the Examiner’s rejection of claims 24 and 27–59.

REVERSED