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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/482,197	09/10/2014	Eyran Lida	Va_Edge_Shaping1	4199
16759	7590	07/01/2020	EXAMINER	
Active Knowledge Ltd. P.O. Box 294 Kiryat Tivon, 36011 ISRAEL			VANG, MENG	
			ART UNIT	PAPER NUMBER
			2457	
			NOTIFICATION DATE	DELIVERY MODE
			07/01/2020	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EYRAN LIDA and AVIV SALAMON

Appeal 2018-007208
Application 14/482,197
Technology Center 2400

Before BRADLEY W. BAUMEISTER, SHARON FENICK, and
RUSSELL E. CASS, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–20, which constitute all of the pending claims. Appeal Br. 3. We have jurisdiction under 35 U.S.C. § 6(b)(1).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Valens Semiconductor Ltd. as the real party in interest. Appeal Br. 3.

CLAIMED SUBJECT MATTER

Appellant's Specification describes the present invention as related to delivery of streaming media content over a network, where new streaming sessions may have an effect on the latency of existing streaming sessions. Spec. 1:14–2:28, 4:8–5:13. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A network configured to admit streaming sessions, comprising:

a processor configured to receive a request to establish a new streaming session over a new path, in presence of an existing streaming session; wherein the existing streaming session is established over an existing path, the new path and the existing path pass through an output port of a switch, and the existing streaming session is associated with a limit for its end-to-end latency variation;

the processor is further configured to estimate, before the new streaming session is established, an estimated end-to-end latency variation of the existing streaming session, as if the new streaming session is established over the new path; and

the processor is further configured to: determine, by comparing the estimated end-to-end latency variation with the limit, a determination that the estimated end-to-end latency variation exceeds the limit, and reject the first request based on the determination.

Appeal Br. 14 (Claims Appendix).

STATEMENT OF THE REJECTIONS

The Examiner relies upon the following prior art:

Name	Reference	Date
Georgiadis et al.	IS 5,933,414	Aug. 3, 1999
Thomas et al.	US 8,843,630 B1	Sept. 23, 2014
Lida et al.	US 2011/0317587 A1	Dec. 29, 2011

Claims 1–5 and 7–10 stand rejected under 35 U.S.C. § 112(b) as failing to particularly point out and distinctly claim the subject matter that Appellant regards as the invention. Final Act. 5–6.

Claims 1, 2, 4–9, 11, 12, and 14–20 stand rejected under 35 U.S.C. § 103 as unpatentable over Lida and Georgiadis. Final Act. 7–15.

Claims 3, 10, and 13 stand rejected under 35 U.S.C. § 103 as unpatentable over Lida, Georgiadis, and Thomas. Final Act. 15–19.

OPINION

§ 112 Rejection

The Examiner rejects claims 1–5 and 7–10 under 35 U.S.C. § 112(b) as indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor regards as the invention. Final Act. 5–6. The Examiner quotes a Supreme Court case holding that a machine must be “a concrete thing, consisting of parts, or of certain devices and combination[s] of devices.” *Id.* at 6 (quoting *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863)). The Examiner additionally finds that “there is insufficient structure” in the claims. *Id.* (citing MPEP § 2106.03(I)²).

² This section of the MPEP relates to the categories of statutory subject matter, “processes, machines, manufactures, and compositions of matter,” deemed to be appropriate subject matter for a patent. MPEP § 2106.03(I).

Appellant appeals the rejection, noting that it “is ready to add” suggested limitations to overcome the rejection, and additionally argues, without more, that the claim is not a “means for” claim which would be covered by § 112(f).

Appellant appears to understand the Examiner to have determined the claim to be a “single means claim,” i.e., a claim drafted in “means-plus-function” format, yet reciting only a single element instead of a combination. *See, e.g., In re Hyatt*, 708 F.2d 712, 713–714 (Fed. Cir. 1983) (“The long-recognized problem with a single means claim is that it covers every conceivable means for achieving the stated result, while the specification discloses at most only those means known to the inventor.”). We note that the network of claim 1 as originally filed comprised two elements: an “admission controller” and a “latency variation calculator,” each claimed as configured to perform one or more of the actions that claim 1, as amended, now recites that the processor is configured to perform. Spec. 40.

If, as Appellant appears to surmise, the rejection were based on a determination that the claims constitute “single means” claims, such a rejection should have been made under 35 U.S.C. § 112(a) for lack of enablement—not for lack of written description. *See In re Hyatt*, 708 F.2d at 713–714; MPEP § 2164.08(a). Regardless, we question whether that basis of rejection is the Examiner’s actual intent.

More generally, in spite of discussing issues pertaining to the statutory classes under section 101, the Examiner appears to reject the claims based on determining that the Appellant has failed to particularly point out and distinctly claim the subject matter. Final Act. 5. As best as we can understand, the Examiner’s position appears to be that a conflict exists between claim 1’s preamble and body because the preamble recites a

plurality of elements (“a system”), whereas the claim’s body recites only a single element (“a processor”):

[A] system is ‘a concrete thing, consisting of parts, or of certain devices and combination of devices.’ . . . Here, claims 1–5 and 7–10 are directed to a system, which is a machine, comprising only [a] “processor configured to” rather than “parts and combination of devices.” In addition, the “processor” is configured to perform all the functions of the claim rather than “devices to perform some function and produce a certain effect or result.” Thus, there is insufficient structure in claims 1–5 and 7–10.

Final Act. 6.

We agree with Appellant that the Examiner’s rationale and legal support for the rejection is inadequate. We reverse this rejection.

§ 103 Rejection

The Examiner finds that Lida teaches or suggests the network of claim 1, with the exception of teaching the processor being “configured to determine, by comparing the estimated end-to-end latency variation with the limit, a determination that the estimated end-to-end latency variation exceeds the limit, and reject the first request based on the determination,” which the Examiner finds is taught or suggested by Georgiadis. Final Act. 7–9.

Lida teaches a switched multimedia network consolidating networking of time sensitive data and control streams. Lida, Abstract. Lida describes “T-Adaptors” that communicate with each other over “T-Networks” when sessions have been created. *Id.* ¶¶ 30–31. Control and maintenance of a T-Network may be provided in a Control Point (CP) entity including a Control Point Management Entity (CPME). *Id.* ¶ 38. In one embodiment, a Routing Processor Entity (RPE) may be implemented on top

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of CPME functionality, and the RPE and CPME combine to be aware of and to “maintain the full topology and status of each link in the network,” as well as to compute optimal routes for each session upon creation. *Id.* ¶¶ 143–144.

The Examiner cites Lida’s teaching that the “RPE takes in[to] account the latency variation when calculating the routing,” as part of the teaching or suggestion of an estimation, before the new streaming session is established, of an estimated end-to-end latency variation of the existing streaming. Lida ¶ 265 (cited at Final Act. 8). The Examiner additionally finds, “the claims fail to recite that the new streaming session or data pertaining to the new streaming session is used to estimate the end-to-end latency variation.” Final Act. 4; *see also* Answer 7. The Examiner additionally finds that Lida teaches an estimated end-to-end latency calculation, as if the new streaming session is established over the new path. Final Act. 4 (citing Lida ¶¶ 104, 106).

Appellant argues that, contrary to the Examiner’s finding, the claims do require that data pertaining to the (potential) new streaming session is used in the claimed estimation, and that the Examiner has not shown this limitation to be taught or suggested in Lida. Appeal Br. 9; Reply Br. 3.

The limitation of claim 1 at issue requires that “the processor is further *configured to estimate*, before the new streaming session is established, *an estimated end-to-end latency variation* of the existing streaming session, *as if the new streaming session is established over the new path.*” Appeal Br. 14 (Claims Appendix) (emphasis added). We agree with Appellant that the broadest reasonable interpretation of this claim language requires that this estimation would use or incorporate data pertaining to the requested new streaming session.

With respect to the portions of Lida cited by the Examiner for this proposition, Lida discloses that T-Network services may include “[d]ifferent levels of packet Scheduling-Priority translating into different latency and latency variation figures per priority level.” Lida ¶ 104. Lida also discloses, “[t]he per packet type, Scheduling-Priority property creates differentiation in the service provided by the network, for different data types, in terms of max latency and max latency variation over the full network path.” Lida ¶ 106.

While the cited portions of Lida do describe differentiating traffic based on latency variation, we agree with the Appellant that the cited portions do not teach or suggest the calculation of an estimate of end-to-end latency variation for an existing streaming session as if a new streaming session has been established. Therefore, we reverse this rejection.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
1–5, 7–10	112(b)	Indefiniteness		1–5, 7–10
1–2, 4–9, 11, 12, 14–20	103	Lida, Georgiadis		1–2, 4–9, 11, 12, 14–20
3, 10, 13	103	Lida, Georgiadis, Thomas		3, 10, 13
Overall Outcome				1–20

REVERSED