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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ESA MARKUS METSALA and HEIKKI-STEFAN ALMAY

Appeal 2019-004333
Application 14/780,785
Technology Center 2400

Before MAHSHID D. SAADAT, JAMES R. HUGHES, and JENNIFER L. McKEOWN, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Claims 32–51 are pending, stand rejected, are appealed by Appellant,[1] and are the subject of our decision under 35 U.S.C. § 134(a). *See* Final Act. 1–2; Appeal Br. 2.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Nokia Solutions and Networks Oy. *See* Appeal Br. 3.

[2] We refer to Appellant's Specification ("Spec."), filed Sept. 28, 2015 (claiming benefit of PCT/EP2013/056541, filed Mar. 27, 2013); Appeal Brief ("Appeal Br."), filed Nov. 19, 2018; and Reply Brief ("Reply Br."), filed May 14, 2019. We also refer to the Examiner's Final Office Action

CLAIMED SUBJECT MATTER

The claimed subject matter relates "generally to wireless communications networks, and more particularly to providing a secured network architecture." Spec. 1:7–9. More specifically, Appellant's claimed subject matter relates to apparatuses and methods for providing network security in a communications system by providing secure storage for an X.509v3 digital certificate, mutually authenticating ports of a first and a second apparatus using IEEE 802. 1X port based authentication and IEEE 802. 1AR secure device identity certificates and, for Ethernet transport, creating a virtual port for each selected traffic type, creating a different media access control security (MACsec) secure connectivity association (CA) for each virtual port, maintaining an operator-programmable security policy for each selected traffic type, and repeatedly re-authenticating a port by means of an operator-definable timer value. *See* Spec. 1:34–3:4; Abstract. Claim 32 (directed to method), claim 33 (directed to a method), claim 41 (directed to an apparatus), and 46 (directed to an apparatus) are independent. Claim 32, reproduced below, is illustrative of the claimed subject matter:

> 32. A method of providing network security in a communications system, said method comprising:
>
> providing, in a first apparatus and in a second apparatus, a secure storage for an X.509v3 digital certificate;
>
> mutually authenticating ports of the first apparatus and the second apparatus by using IEEE 802.1X port based authentication and IEEE 802. 1AR secure device identity certificates, wherein a number of media access control (MAC)

("Final Act."), mailed Feb. 27, 2018; and Answer ("Ans.") mailed Mar. 20, 2019.

addresses is limited to a configurable number per port in the first apparatus and the second apparatus;

dividing traffic types using an operator-configurable selector function into at least one of user plane, control plane, synchronization plane, and management plane traffic types, or one or more further traffic types;

wherein for Ethernet transport, the method comprises:

creating a virtual port for each selected traffic type;

creating a different media access control security (MACsec) secure connectivity association (CA) for each virtual port;

maintaining an operator-programmable security policy for each of the selected traffic types; and

repeatedly re-authenticating a port by means of an operator-definable timer value.

Appeal Br. 27 (Claims App.) (emphasis added).

REFERENCES

The prior art relied upon by the Examiner as evidence is:

Name	Reference	Date
Delker et al. ("Delker")	US 8,341,717 B1	Dec. 25, 2012
Elzur et al. ("Elzur")	US 2008/0126559 A1	May 29, 2008
Falk et al. ("Falk")	US 2013/0132541 A1	May 23, 2013 (filed July 8, 2011)
Gai et al. ("Gai")	US 2013/0329743 A1	Dec. 12, 2013[3]

[3] Gai (US 2013/0329743 A1) was filed on Aug. 13, 2013, claiming benefit of US 12/822,551, filed June 24, 2010.

REJECTIONS[4]

1. The Examiner rejects claims 32–48, 50, and 51 under 35 U.S.C. § 103 as being unpatentable over Delker, Gai, and Elzur. *See* Final Act. 5–10.

2. The Examiner rejects claim 49 under 35 U.S.C. § 103 as being unpatentable over Delker, Gai, Elzur, and Falk. *See* Final Act. 10.

ANALYSIS

Obviousness Rejection of Claims 32–48, 50, and 51

The Examiner rejects independent claims 32, 33, 41, and 46 (as well as dependent claims 34–40, 42–45, 47, 48, 50, and 51) over Delker, Gai, and Elzur. *See* Final Act. 5–10; Ans. 3–12. Appellant contends Delker, Gai, and Elzur do not teach the disputed limitations of claims 32–48, 50, and 51. *See* Appeal Br. 11–23; Reply Br. 4–5. Specifically, Appellant contends, with respect to claim 32, that the Examiner-cited portions of Delker (*see* Final Act. 5–7; Ans. 3–4 (citing Delker, col. 5, ll. 57–62; col. 8, ll. 56–63; col. 10, ll. 57–63)) do not teach or suggest "'repeatedly re-authenticating a port by means of an operator-definable timer value,' as recited in independent claim 32." Appeal Br. 11. Appellant also contends that "Delker is silent with respect to the 'time period' *being defined by an operator*" and "Delker provides no discussion of [a] timer value being definable, [or a] timer value being defined by an operator." Appeal Br. 12; *see* Appeal Br. 11–12; Reply Br. 4–5. Appellant further contends that Delker fails to describe how the

[4] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112–29, 125 Stat. 284 (2011), amended 35 U.S.C. § 103. Because the present application has an effective filing date (Mar. 27, 2013) after the AIA's effective date, this decision refers to 35 U.S.C. § 103.

configuration information is defined by an operator, or that the configuration information is associated with a timer value, generally, or an operator-definable timer value, in particular. *See* Reply Br. 4. Appellant contends that Delker, instead, "simply notes that configuration information is configured and available for service requester devices 150 and 160 to use for their specific device classification associated with the VLANs." Reply Br. 4, *see* Reply Br. 5.

We agree with Appellant that the Examiner-cited portions Delker do not teach or suggest the disputed features of claim 32 (or the other pending claims). Specifically, with respect to claim 32, the Examiner's citation (*see* Final Act. 5–6; Ans. 3–4) to Delker's general teaching of configuration information in a database (Delker, col. 5, ll. 57–62) and general teaching of a time period for discontinuing an association with a virtual network (Delker, col. 10, ll. 57–63) do not fairly teach or suggest "an operator-definable timer value" (claim 32). It follows that the Examiner's citation (*see* Final Act. 6; Ans. 3–4) to Delker's general teaching of multiple authentications (a supplicant component submitting a second device identity certificate for authentication) (col. 8, ll. 56–63; col. 10, ll. 57–63) does not fairly teach or suggest "repeatedly re-authenticating a port using an operator-definable timer value" (claim 32).

Consequently, we are constrained by the record before us to find that the Examiner erred in concluding Delker, Gai, and Elzur render Appellant's independent claims 32, 33, 41, and 46 obvious. Claims 34–40, 42–45, 47, 48, 50, and 51 depend from and stand with their respective base claims. Accordingly, Appellant's contentions persuade us of error in the Examiner's

obviousness rejection of claims 32–48, 50, and 51, and we reverse the Examiner's rejection of these claims.

Obviousness Rejection of Claim 49

The Examiner rejects claim 49 under 35 U.S.C. § 103 as being unpatentable over Delker, Gai, Elzur, and Falk. *See* Final Act. 10. The Examiner does not suggest Falk, alone or in combination with Delker, Gai, and Elzur, cures the above noted deficiencies of Delker (*supra*). Therefore, we reverse the Examiner's obviousness rejection of dependent claim 49 for the same reasons set forth for claim 32 (*supra*).

CONCLUSION

Appellant has shown that the Examiner erred in rejecting claims 32–51 under 35 U.S.C. § 103. We, therefore, do not sustain the Examiner's rejections of claims 32–51.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
32–48, 50, 51	103	Delker, Gai, Elzur		32–48, 50, 51
49	103	Delker, Gai, Elzur, Falk		49
Overall Outcome				32–51

REVERSED