UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NOKIA CORP. AND NOKIA OF AMERICA CORP. Petitioners

V.

PACKET INTELLIGENCE LLC, Patent Owner

Case: IPR2019-01292

U.S. Patent No. 6,771,646

PETITION FOR *INTER PARTES* REVIEW UNDER 35 U.S.C. §311-319 AND 37 C.F.R. §42

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	4.	Bruins 27
	5.	RFC 1945 - Hypertext Transfer Protocol HTTP/1.028
B.	Count 1	: Riddle in View of Wakeman and Bruins Renders Claims 1, 2,
		nd 18 as Obvious; and Riddle in View of Wakeman, Cheriton,
		ins Renders Claim 7 as Obvious
	1.	Claim 1
	a)	Limitation [1 Pre] "A packet monitor for examining packet
	,	passing through a connection point on a computer network,
		each packet conforming to one or more protocols, the monitor
		comprising:"
	b)	Limitation [1a] "(a) a packet acquisition device coupled to the
	,	connection point and configured to receive packets passing
		through the connection point;"
	c)	Limitation [1b] "(b) a memory for storing a database
	·	comprising flow-entries for previously encountered
		conversational flows to which a received packet may belong, a
		conversational flow being an exchange of one or more packets
		in any direction as a result of an activity corresponding to the
		flow;"
	d)	Limitation [1c] "(c) a cache subsystem coupled to the flow-
		entry database memory providing for fast access of flow-
		entries from the flow-entry database;"
	e)	Limitation [1d] "(d) a lookup engine coupled to the packet
		acquisition device and to the cache subsystem and configured
		to lookup whether a received packet belongs to a flow-entry in
		the flow-entry database, the looking up being via the cache
	0	subsystem; and"
	f)	Limitation [1e] "(e) a state processor coupled to the lookup
		engine and to the flow-entry-database memory, the state
		processor being to perform any state operations specified for
		the state of the flow starting from the last encountered state of
		the flow in the case that the packet is from an existing flow,
		and to perform any state operations required for the initial state
		of the new flow in the case that the packet is not from an
	2	existing flow."
	2.	Claim 2
	a)	Limitation [2] "A packet monitor according to claim 1, further
		comprising: a parser subsystem coupled to the packet acquisition device and to the lookup engine such that the
		acquisition device is coupled to the lookup engine via the
		acquistion device is coupled to the lookup engine via the



	parser subsystem, the parser subsystem configured to extract
	identifying information from a received packet,"49
b)	Limitation [2b] "wherein each flow-entry is identified by
	identifying information stored in the flow-entry, and wherein
	the cache lookup uses a function of the extracted identifying
	information."50
3.	Claim 3
a)	Limitation [3] "A packet monitor according to claim 2,
	wherein the cache subsystem is an associative cache subsystem
	including one or more content addressable memory cells
	(CAMs)."51
4.	Claim 752
a)	Limitation [7 Pre] "A packet monitor for examining packets
	passing through a connection point on a computer network,
	each packet conforming to one or more protocols, the monitor
	comprising:"
b)	Limitation [7a] "a packet acquisition device coupled to the
	connection point and configured to receive packets passing
	through the connection point;"52
c)	Limitation [7b] "an input buffer memory coupled to and
	configured to accept a packet from the packet acquisition
	device;"
d)	Limitation [7c] "a parser subsystem coupled to the input buffer
	memory, the parsing subsystem configured to extract selected
	portions of the accepted packet and to output a parser record
	containing the selected portions;"
e)	Limitation [7d] "a memory for storing a database of one or
	more flow-entries for any previously encountered
	conversational flows, each flow-entry identified by identifying
	information stored in the flow-entry;"56
f)	Limitation [7e] "a lookup engine coupled to the output of the
	parser subsystem and to the flow-entry memory and configured
	to lookup whether the particular packet whose parser record is
	output by the parser subsystem has a matching flow-entry, the
	looking up using at least some of the selected packet portions
	and determining if the packet is of an existing flow;"57
g)	Limitation [7f] "a cache subsystem coupled to and between the
	lookup engine and the flow-entry database memory providing
	for fast access of a set of likely-to-be-accessed flow-entries
	from the flow-entry database: and"



h)	Limitation [7g] "a flow insertion engine coupled to the flow- entry memory and to the lookup engine and configured to
	create a flow-entry in the flow-entry database, the flow-entry including identifying information for future packets to be
i)	identified with the new flow-entry,"60 Limitation [7h] "the lookup engine configured such that if the
1)	packet is of an existing flow, the monitor classifies the packet as belonging to the found existing flow; and"
j)	Limitation [7i] "if the packet is of a new flow, the flow
37	insertion engine stores a new flow-entry for the new flow in
	the flow-entry database, including identifying information for future packets to be identified with the new flow-entry,"63
k)	Limitation [7j] "wherein the operation of the parser subsystem
	depends on one or more of the protocols to which the packet
	conforms."63
5.	Claim 1664
a)	Limitation [16 Pre] "A method of examining packets passing
	through a connection point on a computer network, each
	packets conforming to one or more protocols, the method
1 \	comprising:"
b)	Limitation [16a] "(a) receiving a packet from a packet
`	acquisition device;
c)	Limitation [16b] "(b) performing one or more
	parsing/extraction operations on the packet to create a parser
	record comprising a function of selected portions of the
1\	packet;"
d)	Limitation [16c] "(c) looking up a flow-entry database
	comprising none or more flow-entries for previously
	encountered conversational flows, the looking up using at least
	some of the selected packet portions and determining if the
-)	packet is of an existing flow, the lookup being via a cache;" .65
e)	Limitation [16d] "(d) if the packet is of an existing flow,
	classifying the packet as belonging to the found existing flow;
Ð	and"
f)	new flow-entry for the new flow in the flow-entry database,
	including identifying information for future packets to be
	identified with the new flow-entry,"66
	identified with the flew flow-chiry,00



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