

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

In re *Inter Partes* Review of:

U.S. Patent Nos. 6,651,099, 6,665,725, 6,771,646, 6,839,751, and 6,954,789

DECLARATION OF DR. KEVIN JEFFAY

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
US Patent and Trademark Office
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	a) Limitation [1 Pre] “A packet monitor for examining packets passing through a connection point on a computer network in real-time, the packets provided to the packet monitor via a packet acquisition device connected to the connection point, the packet monitor comprising:”	158
	b) Limitation [1a] “(a) a packet-buffer memory configured to accept a packet from the packet acquisition device;”.....	164
	c) Limitation [1b] “(b) a parsing/extraction operations memory configured to store a database of parsing/extraction operations that includes information describing how to determine at least one of the protocols used in a packet from data in the packet;”	167
	d) Limitation [1c] “(c) a parser subsystem coupled to the packet buffer and to the pattern/extraction operations memory, the parser subsystem configured to examine the packet accepted	

	by the buffer, extract selected portions of the accepted packet, and form a function of the selected portions sufficient to identify that the accepted packet is part of a conversational flow-sequence;”	176
(1)	Riddle identifies “conversational flow[s]” or “conversational flow-sequences” through Riddle’s disclosure of “service aggregates”	178
(2)	Riddle identifies “conversational flow[s]” or “conversational flow-sequences” through Riddle’s ability to classify PointCast traffic	186
e)	Limitation [1d] “(d) a memory storing a flow-entry database including a plurality of flow-entries for conversational flows encountered by the monitor;”	191
f)	Limitation [1e] “(e) a lookup engine connected to the parser subsystem and to the flow-entry database, and configured to determine using at least some of the selected portions of the accepted packet if there is an entry in the flow-entry database for the conversational flow sequence of the accepted packet;”	198
g)	Limitation [1f] “(f) a state patterns/operations memory configured to store a set of predefined state transition patterns and state operations such that traversing a particular transition pattern as a result of a particular conversational flow-sequence of packets indicates that the particular conversational flow-sequence is associated with the operation of a particular application program, visiting each state in a traversal including carrying out none or more predefined state operations;”	200
h)	Limitation [1g] “(g) a protocol/state identification mechanism coupled to the state patterns/operations memory and to the lookup engine, the protocol/state identification engine configured to determine the protocol and state of the conversational flow of the packet; and”	214
i)	Limitation [1h] “(h) a state processor coupled to the flow-entry database, the protocol/state identification engine, and to the state patterns/operations memory, the state processor, configured to carry out any state operations specified in the state patterns/operations memory for the protocol and state of the flow of the packet,”	216
j)	Limitation [1i] “the carrying out of the state operations furthering the process of identifying which application	

program is associated with the conversational flow-sequence of the packet, the state processor progressing through a series of states and state operations until there are no more state operations to perform for the accepted packet, in which case the state processor updates the flow-entry, or until a final state is reached that indicates that no more analysis of the flow is required, in which case the result of the analysis is announced.” 220

2. Claim 2 223

 a) Limitation [2] “A packet monitor according to claim 1, wherein the flow-entry includes the state of the flow, such that the protocol/state identification mechanism determines the state of the packet from the flow-entry in the case that the lookup engine finds a flow-entry for the flow of the accepted packet.” 223

3. Claim 4 225

 a) Limitation [4a] “A packet monitor according to claim 1, further comprising: a compiler processor coupled to the parsing/extraction operations memory, the compiler processor configured to run a compilation process that includes:” 225

 b) Limitation [4b] “receiving commands in a high-level protocol description language that describe the protocols that may be used in packets encountered by the monitor, and” 226

 c) Limitation [4c] “translating the protocol description language commands into a plurality of parsing/extraction operations that are initialized into the parsing/extraction operations memory.” 229

4. Claim 5 230

 a) Limitation [5a] “A packet monitor according to claim 4, wherein the protocol description language commands also describe a correspondence between a set of one or more application programs and the state transition patterns/operations that occur as a result of particular conversational flow-sequences associated with an application program, ” 230

 b) Limitation [5b] “wherein the compilation process further includes translating the protocol description language commands into a plurality of state patterns and state operations that are initialized into the state patterns/operations memory.” 232

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