

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

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Patent Trial and Appeal Board
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TABLE OF CONTENTS

I.	INTRODUCTION	23
II.	BACKGROUND	24
III.	STATEMENT OF LEGAL PRINCIPALS	28
A.	Anticipation	28
B.	Obviousness	29
IV.	SUMMARY OF THE CHALLENGED PATENTS	30
A.	Overview of the Technology	30
1.	Network Protocols and Protocol Layering.....	30
2.	Network Packets	42
3.	Monitoring Network Traffic	43
4.	Control and Data Transmission in Network Protocols.....	46
B.	Overview of the Challenged Patents.....	49
1.	“Connection Flow” vs. “Conversational Flow”	50
2.	The ’099 Patent.....	53
3.	The ’725 Patent.....	57
4.	The ’646 Patent.....	59
5.	The ’751 Patent.....	62
6.	The ’789 Patent.....	64
C.	The Prosecution History of the Challenged Patents	66
1.	The Prosecution History of the ’099 Patent.....	66
2.	The Prosecution History of the ’725 Patent.....	67
3.	The Prosecution History of the ’646 Patent.....	68
4.	The Prosecution History of the ’751 Patent.....	72
5.	The Prosecution History of the ’789 Patent.....	74
D.	Prior <i>Inter Partes</i> Reviews	75
E.	German Nullity Proceeding.....	77
V.	CLAIM CONSTRUCTION	81
A.	“Conversational Flow[s]” or “Conversational Flow Sequence”.....	81
1.	Examples of “Conversational Flows”.....	82
2.	Dispute over the Scope of “Conversational Flow[s]” or “Conversational Flow Sequence”	96
B.	“State of the Flow”	102
C.	“State Operations”	104
D.	“Flow-entry database”	107
E.	“Parser Record”	108

F.	“Child Protocol”	109
G.	“Parsing/Extraction Operations”	109
H.	Means-Plus-Function Terms	109
VI.	OVERVIEW OF THE CHALLENGES	113
A.	Level of Ordinary Skill in the Art.....	113
B.	Priority Date.....	115
C.	Prior Art.....	115
	1. Riddle	115
	a) Summary of the Problem and Solution.....	117
	b) The Operation of Riddle.....	120
	2. Cheriton	132
	3. RFC 1945 - Hypertext Transfer Protocol -- HTTP/1.0	133
	4. RFC 1889 - RTP: A Transport Protocol for Real-Time Applications 139	
	5. RFC 2326 - Real Time Streaming Protocol (RTSP).....	142
	6. Baker	144
	7. Wakeman.....	148
	8. Bruins	154
	9. Hasani.....	156
D.	Summary of the Challenges.....	157
VII.	THE CLAIMS OF THE '099 PATENT ARE UNPATENTABLE.....	158
A.	The '099 Patent Count 1: Riddle in View of Cheriton and Bruins Renders claims 1, 2, 4, and 5 Obvious.....	158
	1. Claim 1	158
	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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