

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PADCOM, INC.,)
)
 Plaintiff and)
 Counterclaim)
 Defendant,)
)
 v.) Civ. No. 03-983-SLR
)
 NETMOTION WIRELESS, INC.,)
)
 Defendant and)
 Counterclaim)
 Plaintiff.)

MEMORANDUM ORDER

At Wilmington this *22nd* day of February, 2006, having heard oral argument and having reviewed the papers submitted in connection with the parties' proposed claim construction;

IT IS ORDERED that the disputed claim language in United States Patent Nos. 6,198,920 ("the '920 patent"), 6,418,324 ("the '324 patent") and 6,826,405 ("the '405 patent"), as identified by the above referenced parties, shall be construed consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit in Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005), as follows:

1. Terms of art applicable to all patents in suit:

a. "Network" is a collection of two or more devices (for example, hosts or routers) interconnected by communication

links.

b. **"Network layer"** is layer three of the seven-layer Open System Interconnection (OSI) model and is responsible for delivery of packets over a sequence of one or more communication links, from a source host to a destination host. Different networks may use different network layer protocols.

c. **"Data link layer"** is layer two of the seven-layer Open System Interconnection (OSI) model and is responsible for delivery of frames hop-by-hop, from one device to another device on the same communication link.

d. **"Hop"** is a single communication link between two devices. In forwarding a packet, a hop is traversed each time the packet is forwarded from one device to the immediate next device along the path of that packet.

e. **"Packet"** is a unit of packaged information, such as data. Packets are generated at the network layer and are transmitted from a source host to a destination host. Each packet is carried within a "frame" by the data link layer over each respective hop.

f. **"Data packet"** is a packet that contains data from an application program.

g. **"Data communication session"** is an association between two applications communicating over at least one network, permitting an exchange of data between the applications.

2. **"Router"**¹: Hardware and/or software operating at the network layer that directs data between networks.

The specification of the '324 patent expressly defines a router: "Networks may be interconnected by routers which operate at the network level and convey messages between compatible networks . . . Routers operate at the network layer . . . and can route between networks that use different data-link layers . .

.."² The specification of the '405 patent states that, in one aspect of the invention, "a router is provided for dynamically routing data over multiple dissimilar parallel wireless networks . . ."

³ The '324 patent specification states that, "Optionally, the router may be implemented entirely as a software process";⁴ therefore, the construction is not limited to only hardware.

3. **"Dynamically routing data"**⁵: Receiving data, selecting the next hop for the data in accordance with network selection criteria, and transmitting the data to the next hop.

The routing decisions are described in the specification of the '324 patent as based on "such metrics as network speed and

¹Claims 6 and 16 of the '920 patent.

²'324 patent, col. 2, ll. 26-39.

³'405 patent, col. 7, ll. 38-40.

⁴'324 patent, col. 40, ll. 7-8.

⁵Claims 10, 49, 60 and 67 of the '324 patent and claims 18, 19, 22, 23, 39, 44 and 71 of the '405 patent.

interface availability," in addition to "destination network, time of day, type of data, etc."⁶ The patent again discusses the criteria used to select a particular network as including, but not limited to, "Which Network is connected to which Router port, time of day and date, priority (switching sequence) of each Network, cost per packet of each Network, and preferred default Network."⁷ Discussion of the decision process in the specification does not limit the transmission to "packets," but rather uses the term "data."⁸

4. "Dissimilar networks"⁹; "dissimilar communication links"¹⁰; and "incompatible networks"¹¹: Different at either the network or the data link layers, or at both layers.

The specification of the '324 patent provides that an object of the invention is to provide an apparatus and method for a data path through "a plurality of different wireless communications link protocols and a plurality of different wired networks

⁶'324 patent, col. 33, ln. 57 - col. 34, ln. 3.

⁷'324 patent, col. 35, ll. 37-43.

⁸'324 patent, col. 30, ll. 7-20.

⁹Claims 6 and 16 of the '920 patent, claims 10, 49 and 58 of the '324 patent and claims 18, 19, 22, 23, 39, 44 and 71 of the '405 patent.

¹⁰Claims 60 and 67 of the '324 patent.

¹¹Claim 68 of the '405 patent.

protocols. . .,"¹² thereby teaching incompatibilities at the network layer. The specification also describes an aspect of the invention as "a computer readable medium" that provides a program for "dynamically routing data over multiple dissimilar parallel wireless networks." The specification of the '405 patent states that the medium includes a switching code segment that switches from "a first available network to a second available network, which is dissimilar at a link layer from the first available network,"¹³ thereby teaching incompatibilities at the link layer.

Finally, the '324 patent specification addresses the problem of networks that are inherently incompatible, meaning they are incompatible at both the data link and network levels.¹⁴

5. "Parallel networks"¹⁵; and "parallel communications links"¹⁶: Network paths connected between the same pair of nodes or endpoints.

As submitted by both parties, the IEEE dictionary defines "parallel": "Two-terminal elements are connected in parallel

¹²'324 patent, col. 5, ll. 10-15; col. 10, ll. 61-62 (stating that, in accordance with the invention, "multiple wired networks 10 with different protocols may be linked").

¹³'405 patent, col. 7, ll. 56 - col. 8, ll. 2.

¹⁴'324 patent, col. 4, ll. 31-37.

¹⁵Claims 6 and 16 of the '920 patent, claims 10, 49 and 58 of the '324 patent and claims 18, 19, 22, 23, 39, 44 and 71 of the '405 patent.

¹⁶Claims 60 and 67 of the '324 patent.

when they are connected between the same pair of nodes." As applied to networks, networks are parallel when connected between the same pair of nodes or endpoints. The patentee has not been its own lexicographer by defining the term "parallel" in the patent. Therefore, the court construes the term consistent with its ordinary meaning in the state of the art.

6. **"Transmission"**¹⁷: The act of transmitting one or more data or data packets over a network.

Claim 6 of the '920 patent is dependent from claim 1. Claim 1 uses the term "transmission" in referring to an act. It is this act that the router monitors, for which the networks are available and during which the router "switches." Claim 6 further defines the act of switching, which occurs "immediately after transporting a first data packet and before transporting a subsequent consecutive data packet."¹⁸ The transporting of data packets is a description of the transmission of claim 1. Claim 39 of the '405 patent and claim 45 of the '324 patent refer to "a transmission." Claim 45 of the '324 reads: "Wherein a transmission between the first device and the remote device occurs while switching. . . ." The use of the term as a noun does not mandate a different construction; the term refers to the act

¹⁷Claims 6 and 16 of the '920 patent, claims 10, 49, 58, 60 and 67 of the '324 patent and claims 18, 19, 22, 23, 39, 44 and 71 of the '405 patent.

¹⁸'920 patent, col. 40, ll. 64-66.

of transmitting, not to a stream of data. According to the claims, transmission can relate to both data and data packets. The specification also uses "transmission" to describe the act of both sending data and data packets.¹⁹

7. "The transmission occurs while the router switches"²⁰; "a transmission occurs while switching"²¹; "the transmission occurs while switching"²²; "switches during a transmission"²³; and "switching during a transmission"²⁴: The router redirects transmission of data or data packets from one network to another network, without disrupting or reinitiating the transmission, and sending the data or data packets over only one of the networks at a time.

The claims teach that the transmission switches "from" one network "to" another network.²⁵ Thereafter, no more transmitting

¹⁹'324 patent, col. 11, ll. 42 - col. 12, ll. 46; col. 12, ll. 4-14; col. 27, ll. 8-10; col. 35, ll. 26-28; col. 32, ll. 20-24.

²⁰Claims 6 and 16 of the '920 patent.

²¹Claims 10, 49 and 58 of the '324 patent.

²²Claims 60 and 67 of the '324 patent.

²³Claims 18, 19, 22, 23, 39 and 44 of the '405 patent.

²⁴Claim 71 of the '405 patent.

²⁵See e.g., '920 patent, col. 40, ll. 38-41; '405 patent, col. 50, ll. 38-39.

occurs on the first network.²⁶ The specification supports the construction that the transmission must be uninterrupted. The Abstract of the '324 patent states that "Switching between the plurality of incompatible networks is transparent to the remote device and host communication network." The specification of the '324 patent equates "transparent" with "invisible."²⁷ The specification also supports the construction that the data or data packets are sent over only one of the networks at a time. The specification states that a decision process is used "when deciding if the current Network is to remain the current Network, and if not, what the next Network shall be."²⁸ This suggests that once the decision is made and the switching occurs, the transmission is no longer on the "current Network" but, instead, is on the next network. The specification refers to the process' decision to "change" networks.²⁹ This mirrors the claims in that transmission of data or data packets are redirected from one network to another. Finally, the specification states that the selection system determines a next network from the plurality of

²⁶ '324 patent, col. 40, ll. 36-37; '324 patent, col. 43, ll. 42-43; '324 patent, col. 44, ll. 40-41; '324 patent, col. 45, ll. 24-25; '405 patent, col. 44, ll. 40-43; '405 patent, col. 47, ll. 26-28; '405 patent, col. 50, ll. 33-34; '920 patent, col. 40, ll. 45-48.

²⁷ '324 patent, col. 10, l. 41.

²⁸ '324 patent, col. 36, ll. 8-10.

²⁹ '324 patent, col. 36, ll. 21-22.

networks "when the selected network becomes unavailable."³⁰ The specification suggests that the data and data packets stop transmitting on the first network and continue on the second network.

8. "Sending data to the database server application via at least two of the plurality of incompatible wireless networks while switching between the at least two incompatible wireless networks"³¹: The data is sent to the database server over at least two incompatible networks while the data or data packets are redirected between the two incompatible wireless networks, without disrupting or reinitiating the transmission, and sending the data or data packets over only one of the networks at a time.

While claim 68 of the '405 patent requires using two of the networks, it specifically states that the data is sent through the two networks while switching between these two networks. As discussed above, the switching element incorporates the notion that the data or data packets, initially on the first network, are redirected to a second network and, as a result, are no longer on the first network.

9. "The transmission can occur over the plurality of parallel dissimilar networks when the single transmission is

³⁰'324 patent, col. 6, ll. 60-64


³¹Claim 68 of the '405 patent.

initiated³²: The transmission can be accomplished over at least two parallel dissimilar networks.

The construction is agreed on by both the parties.

10. "Connected"³³: Ready to send and receive data.

The claim language does not include a limitation that the connection requires a physical attachment. The specification uses the term connection broadly: "In accordance with an aspect of the present invention, the remote devices 52, although not physically connected to the wired communications network 10, are logically connected to the wired communication network"³⁴ Furthermore, the specification uses the term "attached" when referring to physical attachment.³⁵


United States District Judge

³²Claims 6 and 16 of the '920 patent.

³³Claims 6 and 16 of the '920 patent, claims 10, 49, 58, 60 and 67 of the '324 patent and claims 18, 19, 22, 23, 39, 44, 68 and 71 of the '405 patent.

³⁴'324 patent, col. 9, ll. 10-15.

³⁵'324 patent, col. 8, l. 57; col. 9, l. 15.