UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Cisco Systems, Inc. Petitioner

v.

Focal IP LLC, Patent Owner

Patent No. 8,457,113 B2 Filing Date: Jun 22, 2010 Issue Date: Jun. 4, 2013

BRANCH CALLING AND CALLER ID BASED CALL ROUTING TELEPHONE FEATURES

DECLARATION OF DEAN WILLIS IN SUPPORT OF PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,457,113

Inter Partes Review No. 2016-01254

YMAX CORPORATION v. FOCAL IP, LLC FOCAL IP. LLC EX2027 - 1

A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

DOCKET

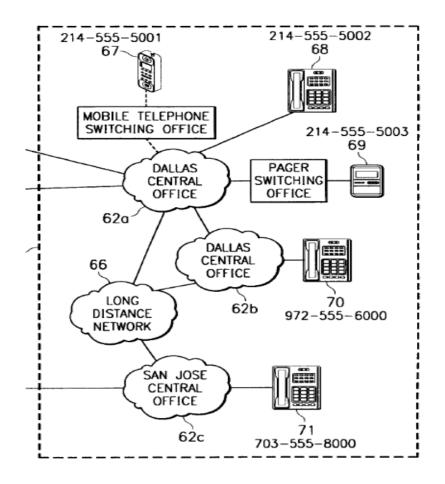
(b) the sophistication of the technology in question, and the rapidity with which innovations occur in the field; (c) the educational level of active workers in the field; and (d) the educational level of the inventor.

21. The relevant technology field for the '113 patent has to do with controllers for connecting calls between a packet network, such as a VoIP network, and a circuit-switched network, such as the Public Switched Telephone Network (PSTN). Based on this, a POSA at the time of the '113 patent filing would have been an engineer with at least a bachelor's degree in electrical engineering, computer science, or a related field, or equivalent experience of at least three years of working in field of telecommunications or networking.

22. Unless otherwise specified, when I mention a POSA or someone of ordinary skill, I am referring to someone with at least the above level of knowledge and understanding.

23. Based on my experiences, I have a good understanding of the capabilities of a person of ordinary skill in the relevant field. Indeed, in addition to being a person of at least ordinary skill in the art, I have worked closely with many such persons over the course of my career.

24. Although my qualifications and experience exceed those of the hypothetical person having ordinary skill in the art defined above, my analysis and opinions regarding the '113 patent have been based on the perspective of a person



39. Telephone services, including voice based telephone calls and fax messaging, is generally carried out over the PSTN, which is the backbone of the telephone system in the United States. Ex. 1011 at 41-43; Ex. 1037 at 49-51. The PSTN consists of a global network of circuit switches arranged in a geographical hierarchy. Ex. 1011 at 41-43; Ex. 1037 at 49-51. In the 1990s most of the connections to the PSTN were made using "last-mile" copper connections that transmitted analog signals. Ex. 1011 at 41-43; Ex. 1037 at 49-50. These connections were routed directly to a central office or edge switch. Ex. 1037, 49-51. In the PSTN, switches known as tandem switches or class 3 switches serve to YMAX CORPORATION v. FOCAL IP, LLC

FOCAL IP. LLC EX2027 - 3

interconnect geographical regions and edge switches or class 5 switches connect between tandem switches and end-user devices, like telephones, within a local geographic area. Ex. 1011 at 41-43, 62-63; Ex. 1013 at 18; Ex. 1037 at 49-51.

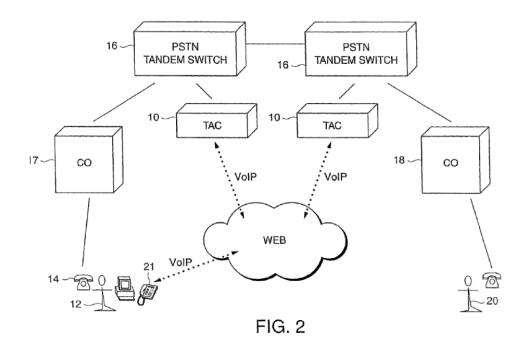
Packet-switched networks rely on a different set of technologies to 40 In a packet-switched network, data, including a voice call, is transmit data. digitized and transmitted in small chunks called packets. Ex. 1012 at 146-149. Each packet includes information called a header address telling the packet where its final destination is. Ex. 1013 at 15; Ex. 1012 at 146-149. Unlike a circuitswitched network, the packets that make up a voice signal can follow different paths, directed by devices called routers, to the same destination and that path is not dedicated to the particular transmission. At the receiving end, the packets are reassembled to transmit the signal. Ex. 1011 at 58-63. Advantageously, packetswitched networks do not rely on direct connections. Ex. 1013 at 18; Ex. 1012 at 146-149. Nor are packet-switched networks affected by failure of a particular line, because the packets can be rerouted. The Internet is an example of a packetswitched network and it operates in accordance with the Internet Protocol (IP) and the Transmission Control Protocol (TCP). Ex. 1028 at 16-21. The combination of the IP and TCP protocols is known as the TCP/IP protocol stack. Ex. 1028 at 16-21. A diagram comparing packet- and circuit switched networks is reproduced below. Ex. 1011 at 59, Fig. 2-34.

> YMAX CORPORATION v. FOCAL IP, LLC FOCAL IP. LLC EX2027 - 4

1001 at col. 1:59-2:16, 2:17-23, 2:40-54. These services were also the type of webbased toll systems that rely upon the toll network through the use of "800" numbers. Ex. 1001 at col. 1:41-44, 2:23-29, 3:41-49.

69. The '113 patent's alleged invention was to provide web-based call selection features through a controller connected to a tandem switch rather than an edge switch, to provide the telephony features. Ex. 1001 at col. 2:1-3, 3:35-40.

70. As shown in figure 2, the tandem access controller (TAC 10) controlled call features the PSTN Tandem Switches:



71. The '113 patent discloses that its controller and system uses known technologies and conventional computer and telephony equipment. Ex. 1001 at col. Background, 1:30-2:54, 2:57-3:62, 4:35-54, 5:32-36, 6:48-67.

YMAX CORPORATION v. FOCAL IP, LLC FOCAL IP. LLC EX2027 - 5

Find authenticated court documents without watermarks at docketalarm.com.

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.