UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/131,395	06/02/2008	Arun Keshava Murthy	82241282	5744

56436   7590   09/23/2016
Hewlett Packard Enterprise
3404 E. Harmony Road
Mail Stop 79
Fort Collins, CO 80528

EXAMINER
JORDAN, KIMBERLY L

ART UNIT	PAPER NUMBER
2194	

NOTIFICATION DATE	DELIVERY MODE
09/23/2016	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

hpe.ip.mail@hpe.com
mkraft@hpe.com
chris.mania@hpe.com

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ARUN KESHAVA MURTHY,
CHETAN ASWATHANARAYANA, and
NEDUCHERALATHAN SHANMUGAM

Appeal 2015-002464
Application 12/131,395
Technology Center 2100

Before DANIEL N. FISHMAN, JOSEPH P. LENTIVECH, and
AARON W. MOORE, *Administrative Patent Judges.*

LENTIVECH, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants[1] seek our review under 35 U.S.C. § 134(a) of the
Examiner's final rejection of claims 1–5, 7–12, and 14–19. Claims 6, 13,
and 20 have been canceled. App. Br. 3. We have jurisdiction over the
pending claims under 35 U.S.C. § 6(b).

We AFFIRM.

---

[1] According to Appellants, the real party in interest is Hewlett-Packard
Development Company, LP. App. Br. 3.

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention generally relates to multiplexing reserved ports. Spec. ¶ 1. In response to receiving a request to communicate with a host, it is determined whether a mapping exists between the host and a first remote procedure call (RPC) client handle. *Id.* ¶ 4. If a mapping does not exist between the host and the RPC client handle, a second RPC client handle is determined to establish a mapping. *Id.* The mapping facilitates RPC (remote procedure call) communication with the host. *Id.* Claim 1, which is illustrative, reads as follows:

> 1. A method, comprising:
>
> configuring a remote procedure control (RPC) application to utilize a shared pool of RPC handles wherein a handle is a structure stored in cache that includes transport address information of a remote host, each handle bound independently to a limited number of reserved ports dedicated to the RPC application, to enable a connection to a number of hosts greater than the limited number of reserved ports, without a 1 to 1 mapping of limited number of reserved ports, associated with the pool of RPC handles to the number of hosts;
>
> receiving a request to communicate with a host;
>
> determining whether a mapping exists between the host and a first remote procedure call (RPC)[2] client handle; and
>
> in response to determining that the mapping does not exist between the host and the first RPC client handle, determining a second RPC client handle, from the pool of RPC handles, to establish the mapping by filling the transport address of the host,

---

[2] In claim 1, Appellants use the acronym "RPC" to refer to "remote procedure control" and "remote procedure call." In this Decision, we use the acronym "RPC" to refer to "remote procedure call."

the established mapping facilitating RPC communication with the host,

wherein determining the second RPC client handle includes utilizing a least recently used (LRU) queue where each element within the LRU queue is bound to one of the limited number of reserve ports, wherein the LRU queue is shared among other cache elements.

Rejections

Claims 1–5, 7–12, and 14–19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Aiken et al. (US 7,120,697 B2; issued Oct. 10, 2006) ("Aiken"), Bull, *AIX Communications Programming Concepts*, chapter 8 (2002) ("Bull"), and Boucher et al. (US 2004/0030745A1; published Feb. 12, 2004) ("Boucher"). Final Act. 2–7.

Issue on Appeal

Did the Examiner err in finding that the combination of Aiken, Bull, and Boucher teaches or suggests "wherein determining the second RPC client handle includes utilizing a least recently used (LRU) queue where each element within the LRU queue is bound to one of the limited number of reserve ports, wherein the LRU queue is shared among other cache elements," as recited in claim 1?

ANALYSIS

Appellants do not separately argue claims 1–5, 7–12, 14–19 but, instead, rely on the same arguments for all of these claims. *See* App. Br. 8–10; Reply Br. 2–3. We select claim 1 as representative, and claims 2–5, 7–12, 14–19 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

3

Claim 1

Appellants contend the combination of Aiken, Bull, and Boucher does not teach or suggest the disputed limitations. App. Br. 8–10; Reply Br. 2–3. According to Appellants, the Examiner states Aiken and Bull do not teach or suggest "<u>wherein the LRU queue is shared among other cache elements</u>" and relies on Boucher for teaching this limitation. Appellants contend "Boucher does not address and therefore does not teach or suggest an LRU queue that is shared among other cache elements." App. Br. 8–9. Appellants further contend:

> Aiken appears to teach, "structure or structures for the DVIPA are retrieved from the coupling facility and a lock placed on the structure(s) to prevent other communications protocol stacks from accessing the structure. This may prevent two stacks from simultaneously selecting the same port." (Column 19, Lines 55-60). In addition, Bull appears to teach, "A client program can minimize port mapper calls by caching the port numbers of recently called remote programs." (Page 144, Paragraph 4). Furthermore, the Boucher [reference] states, "The complete set of CCBs exists in host memory, but a subset of these may be "owned" by the card at any given time. This subset is the CCB cache. The INIC can own (cache) up to 256 CCBs at any given time." (Paragraph 0081). Thus, the Aiken, Bull, and Boucher references appear to teach that the CCBs can exist in host memory and/or cache memory, but do not address that the LRU queue is shared among other cache elements.

Reply Br. 3.

We do not find Appellants' contentions persuasive. Non-obviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re*

Merck & Co. Inc., 800 F.2d 1091, 1097 (Fed. Cir. 1986). Here, the Examiner finds:

> Aiken teaches a port is selected for connection between a client and a server (column 4: 28-30) and a port is selected from a shared pool of ports (figure 4 and associated description, figure 12, and column 19: 54-61). Bull discloses a limited number of reserved port numbers, and ports are mapped dynamically to remote programs since the number of remote programs is large compared to the number of ports (page 143, last paragraph - page 144, first paragraph). Boucher discloses a LRU queue and the acquisition of CCB (communication control block that contains context associated with a connection (IP addresses and ports)) buffers controlled by a LRU mechanism (paragraphs 0526, 0584 and 0081). The combination discloses dynamic binding of RPC ports, where the range of reserved port numbers is small compared to the number of remote programs, utilizing a LRU queue.

Ans. 7–8. Based on these findings, the Examiner concludes the combined teachings of Aiken, Bull, and Boucher teach or suggest the disputed limitations. *Id.* Appellants' contentions are directed to the references individually and fail to address what the combined teachings of the references would have taught or suggested to one of ordinary skill in the art. As such, Appellants' contentions are unpersuasive of error.

Accordingly, we sustain the Examiner's rejection of claim 1 and claims 2–5, 7–12, and 14–19, which fall with claim 1.

DECISION

We affirm the Examiner's rejection of claims 1–5, 7–12, and 14–19 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED