



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/210,922	08/16/2011	KENDRA S. HARRINGTON	CPOL973093	3108
62147	7590	11/01/2016	EXAMINER	
PATTERSON & SHERIDAN, LLP/CISC 24 Greenway Plaza SUITE 1600 HOUSTON, TX 77046-2472			CELANI, NICHOLAS P	
			ART UNIT	PAPER NUMBER
			2449	
			NOTIFICATION DATE	DELIVERY MODE
			11/01/2016	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):

PAIR_eofficeaction@pattersonsheridan.com
PSDocketing@pattersonsheridan.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KENDRA S. HARRINGTON and DAN T. WANG

Appeal 2015-003859
Application 13/210,922¹
Technology Center 2400

Before SHARON FENICK, MICHAEL M. BARRY, and
AARON W. MOORE *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 2, 4–10, and 12–20. We have jurisdiction under 35 U.S.C. § 6(b)(1).

We affirm.

¹ Appellants identify Cisco Technology, Inc. as the real party in interest. (Appeal Br. 3.)

Invention

Appellants' invention relates to assigning a network address to a computing device. In IPv6, a network device provides a computing device with a prefix used to generate a unique IP address for the computing device. According to the invention, if no correct prefix is received, a network address using a different communication protocol, such as IPv4, is assigned to and transmitted to the computing device for use in communications over the network. (Abstract.)

Representative Claims

Claims 1 and 9, reproduced below, are representative:

1. A method, comprising:
 - determining whether a prefix of a network address of a first Internet Protocol (IP) version was received at a network device via a communication network;
 - upon determining that the prefix was received:
 - transmitting the prefix from the network device to a computing device, and
 - incorporating the prefix into a unique network address of the first IP version adapted to be used by the computing device to communicate with the communication network; and
 - upon determining that the prefix was not received:
 - assigning to the computing device a network address of a second IP version, wherein the first IP version is different than the second IP version, and
 - transmitting the network address of the second IP version from the network device to the computing device, the network address of the second IP version is adapted to permit the computing device to communicate with the communication network.

9. A network device, comprising:
 - a network address component configured to:
 - determine whether a prefix of a network address of a first IP version was received via a communication network;
 - upon determining the prefix was received, transmit the prefix to a computing device, wherein the prefix is adapted to be incorporated into a unique network address of the first IP version adapted to be used by the computing device to communicate with the communication; and
 - upon determining that the prefix was not received:
 - assign to the computing device a network address of a second IP version, wherein the first IP version is different than the second IP version, and
 - transmit the network address of the second IP version from the network device to the computing device, the network address of the second IP version is adapted to permit the computing device to communicate with the communication network.

Rejections

The Examiner rejects claims 9, 10, and 12–15 under 35 U.S.C. § 101 as directed to non-statutory subject matter. (Final Action 3.)

The Examiner rejects claims 1, 2, 5–10, 13–17, 19, and 20 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement and written description requirements. (Final Action 3–9.)

The Examiner rejects claims 1, 2, 4, 6–10, 12, 14–18, and 20² under 35 U.S.C. § 103(a) as unpatentable over R. Hinden & B. Haberman, Unique Local IPv6 Unicast Addresses RFC 4193 (2005) (hereinafter “RFC 4193”), R. Droms, Network Working Group Request For Comments: 2131 Dynamic

² While the header in the Examiner’s rejection does not indicate that Claims 10 and 17 are part of this rejection, the body of the rejection addresses these claims. (Final Action 9, 19.)

Host Configuration Protocol (1997) (hereinafter “RFC 2131”), and Suzuki (US 2010/0228813 A1; Sept. 9, 2010). (Final Action 9–20.)

The Examiner rejects claims 5, 13, and 19 under 35 U.S.C. § 103(a) as unpatentable over RFC 4193, RFC 2131, Suzuki, and Yoshimoto (US 2008/0212609 A1; Sept. 4, 2008). (Final Action 20–21.)

Issues

(A) Did the Examiner err in rejecting claims 9, 10, and 12–15 as directed to non-statutory subject matter?

(B) Did the Examiner err in rejecting certain claims directed to the use of “a first Internet Protocol (IP) version” and “a second IP version” without limitation to specific IP versions for failing to comply with the enablement requirement of 35 U.S.C. 112, first paragraph?

(C) Did the Examiner err in rejecting certain claims directed to the use of “a first Internet Protocol (IP) version” and “a second IP version” without limitation to specific IP versions for failing to comply with the written description requirement of 35 U.S.C. 112, first paragraph?

(D) Did the Examiner err in finding that the combination of RFC 4193, RFC 2131, and Suzuki teaches or suggests assignment of “a network address of a second IP version” upon determining that a prefix of a network address of a first IP version was not received at a network device, as in claim 1?

(E) Did the Examiner err in finding, with respect to claim 9, that the combination of RFC 4193, RFC 2131, and Suzuki teaches or suggests a network device configured to determine whether a prefix of a network address of a first IP version was received, and to transmit the prefix if

received or assign a network address of a second IP version if the prefix was not received?

ANALYSIS

(A) Non-Statutory Subject Matter

With regard to claims 9, 10, and 12–15, the Examiner finds these claims are directed to non-statutory subject matter because the network device of claim 9 “‘comprises’ only limitations that could be code per se” and “[a] claim to something limited only by code is non-statutory.” (Final Action 3.) With respect to the preamble’s recitation of “a network device,” the Examiner finds that “[g]enerally, the office does not give patentable weight to the preamble of a claim.” (Answer 2.) With respect to the claimed “network address component,” the Examiner finds “[a] component is a nonce word which could (and given its functionality likely does) comprise only code per se.” (*Id.*)

Appellants argue that, “because the point of 35 U.S.C. § 101 is to ensure the claimed invention falls within a statutory class - i.e., process, machine, manufacture, or composition of matter, ignoring the preamble (which defines the statutory class) is a critical error.” (Reply Br. 2; Appeal Br. 7.)

The Examiner finds that “[a]n embodiment of claim 9 could be only code per se.” (Final Action 22). Claim 9 is directed to a network device which comprises only one recited element: a network address component which performs various steps of determination, transmission, and assignment. With respect to the term “network address component,” the Specification discloses that “aspects of the present disclosure, such as the first and second address components, may be implemented in hardware or

software or in a combination of hardware and software. (Spec. ¶ 60.) The first network address component 312 is disclosed as being network address component 255, which corresponds to the network address component in the claim. (*Id.* ¶ 40.)

Additionally, Fig. 2, of the specification depicts a router 120, corresponding to the claimed network device, containing network address component 255. (*Id.* ¶¶ 13, 23.) The Specification discloses, with respect to the block diagrams such as Fig. 2, that, “each block in the . . . block diagrams may represent a module, segment or portion of code, which comprises one or more executable instructions for implementing the specified logical function(s).” (*Id.* ¶ 61.)

Thus, we conclude that one of ordinary skill in the art would understand that the network address component of the claim could be implemented in a non-statutory manner, as code. *Cf. Ex parte Mewherter*, 2013 WL 4477509, *3, *6–7 (PTAB May 8, 2013) (precedential) (finding, in the absence of express limitation in the specification, a term possibly including non-statutory embodiments will be read to include such embodiments, and distinguishing from cases in which the specification contains express language excluding non-statutory embodiments.) Therefore, we are not convinced of Examiner error in the determination that claim 9, and dependent claims 10, and 12–15, are directed to non-statutory subject matter.

Therefore, we affirm the rejection of claims 9, 10, and 12–15 under 35 U.S.C. § 101 as directed to non-statutory subject matter.

(B) 35 U.S.C. § 112(1) Rejection – Enablement

With regard to claims 1, 2, 5–10, 13–17, 19, and 20, the Examiner finds these claims are not enabled, as undue experimentation would be required in order to determine how a generic Internet protocol could function as the “first IP version” of the claim. (Final Action 3–4; Answer 4.)

Appellants argue that, “the lengthy discussion regarding these IP versions clearly enable one of ordinary skill in the art to perform the claimed techniques on any past or future IP protocols that have the functionality and structure recited in the claims.” (Appeal Br. 8.)

We agree with Appellants. The Examiner notes (Final Action 4) that the *Wands* factors of breadth of the claims, amount of direction provided by the inventor, and existence of working examples were considered and weigh against finding enablement. Determining whether any necessary experimentation is undue involves considering relevant factors including, but not limited to: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance presented; (3) the presence or absence of working examples; (4) the nature of the invention; (5) the state of the prior art; (6) the relative skill of those in the art; (7) the predictability or unpredictability of the art; and (8) the breadth of the claims. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

We note that both the Examiner and Appellants discuss the *Wands* factor of “the presence or absence of working examples” – and we find that this factor, and the balance of these *Wands* factors, indicate that one of ordinary skill in the art, using the working example presented by Appellants in the embodiment discussed in the Specification, would be able to determine how to select IP versions which could work in the invention of

claim 1. Thus, we find that claim 1 is enabled, and we reverse the enablement rejection of this claim, and of claims 2, 5–10, 13–17, 19, and 20, rejected on the same basis.

(C) 35 U.S.C. § 112(1) Rejection – Written Description

With regard to claims 1, 2, 5–10, 13–17, 19, and 20, the Examiner finds these claims are not supported by adequate written description in the specification. (Final Action 4–9.) The Examiner cites *LizardTech Inc. v. Earth Resource Mapping Inc.*, 424 F.3d 1336 (Fed. Cir. 2005) in support. In that case, the specification was “directed at describing a particular method for” calculating an array of values while a claim was directed generally at the creation of such an array. *LizardTech* at 1345. The Federal Circuit offered the following analogy:

[S]uppose that an inventor created a particular fuel-efficient automobile engine and described the engine in such detail in the specification that a person of ordinary skill in the art would be able to build the engine. Although the specification would meet the requirements of section 112 with respect to a claim directed to that particular engine, it would not necessarily support a broad claim to every possible type of fuel-efficient engine, no matter how different in structure or operation from the inventor’s engine.

Id.

We agree with Appellants that this is not analogous to the situation in *LizardTech*. (See Appeal Br. 10–11; Reply Br. 3–4.) As Appellants argue, claim 1 focuses on a technique which is described in the specification with respect to a specific embodiment of the technique. In order to satisfy the written description requirement, “the specification must describe an invention understandable to [a] skilled artisan and show that the inventor actually invented the invention claimed.” *Ariad Pharms., Inc. v. Eli Lilly &*

Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). “[T]he test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* (citation omitted). Appellants disclose a generic address assignment process (Spec. ¶ 42, Fig. 4) and claim this process generally, in claim 1, and more specifically, in claim 4.

Thus, we reverse the written description rejection of claim 1, and of claims 2, 5–10, 13–17, 19, and 20, rejected on the same basis.

(D) 35 U.S.C. § 103 Rejection of Claim 1 – assignment of “a network address of a second IP version” upon determining that a prefix of a network address of a first IP version was not received

Appellants argue that the combination of references used by the Examiner does not teach or suggest the use of the receipt of a prefix of a first IP version in a determination of whether to assign a network address for a first IP version or a second IP version, as recited in claim 1. (Appeal Br. 12–16; Reply Br. 5–6.) Appellants argue that Suzuki teaches only conversion of an IPv6 address to an IPv4 address, and compare the teachings of Suzuki (in which “if the gateway device 1 does receive a URL from the terminal 4 that includes an IPv6 IP address, the device 1 translates the IP address into an IPv4 address”) with claim 1 (in which “if the network device does not receive the prefix of the first IP version then it assigns a network address of the second, different IP version to the computing device”). (Appeal Br. 14.) Appellants argue:

Claim 1 recites using the receipt of the prefix at the network device (which is incorporated in the unique network address for IPv6) as the trigger to determine whether to assign a network

address using the first IP version (e.g., IPv6) or the second IP version (e.g., IPv4).

(Appeal Br. 15.) Because, Appellants contend, none of the prior art references teach the use of a receipt of a prefix as a trigger for determining to convert between the versions of IP used for the network address assigned, this rejection is flawed.

The Examiner explains:

[RFC 4193] shows that a system can determine not only whether it has received an IPv6 prefix and then take an action after that determination (such as configuring an address), but that it [has] the further granularity to distinguish between types of IPv6 addresses

(Answer 10.)

In response, Appellants argue that “[a]t most, [RFC 4193] teaches if an IPv6 [prefix] is not received, the system does not perform an action - i.e., the system cannot generate a global or local IPv6 address.” (Reply Br. 5.) Referring to RFC 4193 and Suzuki, Appellants argue that “[t]hese references do not teach or hint at using the determination that an IPv6 address was not received to trigger performance of any kind of affirmative action.” (*Id.*)

However, as the Examiner finds, RFC 4193 describes a system including a node receiving two kinds of prefixes (global and local IPv6 prefixes) and performing different actions based on which kind of IPv6 prefix is retrieved. (Answer 10 (“For the case where both global and Local IPv6 prefixes are being advertised on a subnet, this will require a switch in the devices to only autoconfigure Local IPv6 addresses.”) (citing RFC 4193 § 4.6).) Thus, the Examiner finds:

the “trigger” aspect of the invention is known: IPv6 prefixes are known, and the ability to receive them is known, and the determination of whether a prefix is received is known, and then

using that determination (whether it returns a true or false value) to drive other actions is known.

(Answer 11.)

Appellants' argument is addressed to the individual teachings of the references, rather than the combination of the references. *In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (“[O]ne cannot show nonobviousness by attacking references individually where, as here, the rejections are based on combinations of references.” (citations omitted)); *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *See Keller*, 642 F.2d at 425.

Here, the Examiner finds that the different treatment of traffic on a network, based on the receipt of a specific type of prefix, is taught or suggested in the combination of the prior art. The Examiner's findings are reasonable because the skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle” since the skilled artisan is “a person of ordinary creativity, not an automaton.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420–21 (2007). On this record, Appellants do not present sufficient evidence or persuasive argument that the combination of the cited references was “uniquely challenging or difficult for one of ordinary skill in the art” or “represented an unobvious step over the prior art.” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418–19).

On this issue, we are not convinced that the Examiner erred in rejecting claim 1; independent claims 9 and 16, argued on the same basis (Appeal Br. 15–16); or their dependent claims, which Appellants do not separately argue. We therefore affirm the Examiner’s rejection of claims 1, 2, 4–8, and 16–20 under 35 U.S.C. § 103(a) as unpatentable.³

(E) 35 U.S.C. § 103 Rejection of Claim 9 – network device configured to either transmit a first IP version prefix if received or assign a network address of a second IP version if the prefix was not received

Appellants further argue that:

the cited references do not teach a network device capable of providing information to the same computing device so that the computing device is assigned either a network address of the first IP version or a network address of the second IP version.

(Appeal Br. 17; *see also id.* at 16–18; Reply Br. 6–7.) Appellants stress that the Suzuki gateway device “does not have the capability to assign network addresses for different IP versions to the same computing device.” (Appeal Br. 17.)

However, the claim requires that, depending on whether a prefix of a first IP version is received, the network address component must either transmit the prefix (if a prefix is received) or assign a network address of a second IP version and transmit that network address (if a prefix is not received). There is no requirement in the claim that the same computing device is assigned two network addresses, as Appellants argue. The argument presented is not commensurate with the scope of the claim.

³ Appellants argue an additional basis for Examiner error in the rejection of independent claim 9 and its dependent claims, which we address *infra*.

Thus, we are not convinced that the Examiner erred in rejecting claim 9 or its dependent claims, and we therefore affirm the Examiner's rejection of claims 9, 10, and 12–15 under 35 U.S.C. § 103(a) as unpatentable.

DECISION

We affirm the rejection of claims 9, 10, and 12–15 under 35 U.S.C. § 101 as directed to non-statutory subject matter.

We reverse the rejection of claims 1, 2, 5–10, 13–17, 19, and 20 under 35 U.S.C. § 112, first paragraph as not enabled.

We reverse the written description rejection of claims 1, 2, 5–10, 13–17, 19, and 20 under 35 U.S.C. § 112, first paragraph.

We affirm the Examiner's rejection of claims 1, 2, 4–10, 12–15, and 16–20 under 35 U.S.C. § 103(a) as unpatentable.

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

AFFIRMED