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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

CISCO SYSTEMS, INC., Plaintiff, v. ARISTA NETWORKS, INC., Defendant.	CASE NO. 14-5344 **COMPLAINT FOR COPYRIGHT AND PATENT INFRINGEMENT** **DEMAND FOR JURY TRIAL**

COMPLAINT FOR COPYRIGHT AND PATENT INFRINGEMENT

Plaintiff Cisco Systems, Inc. ("Cisco"), for its complaint against Defendant Arista Networks, Inc. ("Arista"), hereby demands a jury trial and alleges as follows:

INTRODUCTION

1. Cisco is an information technology (IT) company that was founded in 1984. Cisco is the worldwide leader in developing and implementing the networking technologies that enable global interconnectivity and the Internet of Everything. Cisco employs thousands of networking engineers at its headquarters in San Jose, California, and elsewhere, and invests billions of dollars annually in research and development focused on creating the future of networking technologies.

2. Decades after Cisco's founding, Arista was founded by former Cisco employees, many of whom are named inventors on Cisco's networking patents. Among others, Arista's: 1) founders, 2) President and CEO, 3) Chief Development Officer, 4) Chief Technology Officer, 5) Senior Vice President for Customer Engineering, 6) Vice President of Business Alliances, 7) former Vice President for Global Operations and Marketing, 8) Vice President of Systems Engineering and Technology Marketing, 9) Vice President of Hardware Engineering, 10) Vice President of Software Engineering, and 11) Vice President of Manufacturing and Platform Engineering all were employed by Cisco prior to joining Arista. Moreover, four out of the seven members of Arista's Board of Directors were previously employed by Cisco.

3. Arista's goal is to sell networking products. Rather than building its products and services based on new technologies developed by Arista, however, and providing legitimate competition to Cisco, Arista took a shortcut by blatantly and extensively copying the innovative networking technologies designed and developed by Cisco.

4. Arista has acknowledged the substantial investment in time and employment that would have been required to legitimately compete with Cisco. Arista's President and Chief Executive Officer, former Cisco employee Jayshree Ullal, has stated:

> "Since I helped build the enterprise [at Cisco], I would never compete with Cisco directly in the enterprise in a conventional way. It makes no sense. ***It would take me 15 years***

and 15,000 engineers, and that's not a recipe for success." (Emphasis added.)

5. In fact, by simply copying numerous networking technologies developed by Cisco, Arista avoided hiring the thousands of engineers and making the substantial investments that would otherwise have been needed to legitimately develop its own technologies. Indeed, Cisco is not the only party to find itself aggrieved by Arista's alleged misappropriation of intellectual property. Arista Co-Founder David Cheriton has himself alleged that Arista misappropriated his own intellectual property in a complaint that his company Optumsoft has filed against Arista.

6. Arista's use and copying of Cisco's technologies and copyrighted materials is widespread and flagrant. Arista copied Cisco's operating system software (including its Internetwork Operating System ("IOS"[1], "IOS XR", and "IOS XE") and its Nexus Operating System ("NX-OS") (collectively, "Cisco IOS"), which was developed by Cisco for its products. Arista also flagrantly copied Cisco's operating system documentation into Arista's documentation. Of particular importance, Arista's verbatim copying of the Cisco IOS software allowed it to replicate Cisco's widely acclaimed command-line interface ("CLI"). A CLI is the set of commands employed by a user in operating technology products. Cisco's CLI is used by Cisco's customers to communicate with its products, as well as to configure and manage them. Arista also incorporated numerous patented Cisco technologies into Arista's products covering a variety of critical features on Arista's products.

7. Arista deliberately and repeatedly engaged in extensive copying in order to compete unfairly with Cisco. Arista publicly touts that its copying of Cisco's CLI makes it easier for Cisco's customers to switch rapidly from Cisco's products to competing products sold by Arista. Arista even has publicly congratulated itself for avoiding the time and investment needed to create the CLI that Cisco created. For example, Ms. Ullal has stated:

> "[A] Cisco CCIE expert would be able to use Arista right away, because we have a similar command-line interface and operational look and feel. ***Where we don't have to invent, we don't.***" (Emphasis added.)

Ullal's statement is noteworthy for its understatement, however. While it has long been understood that

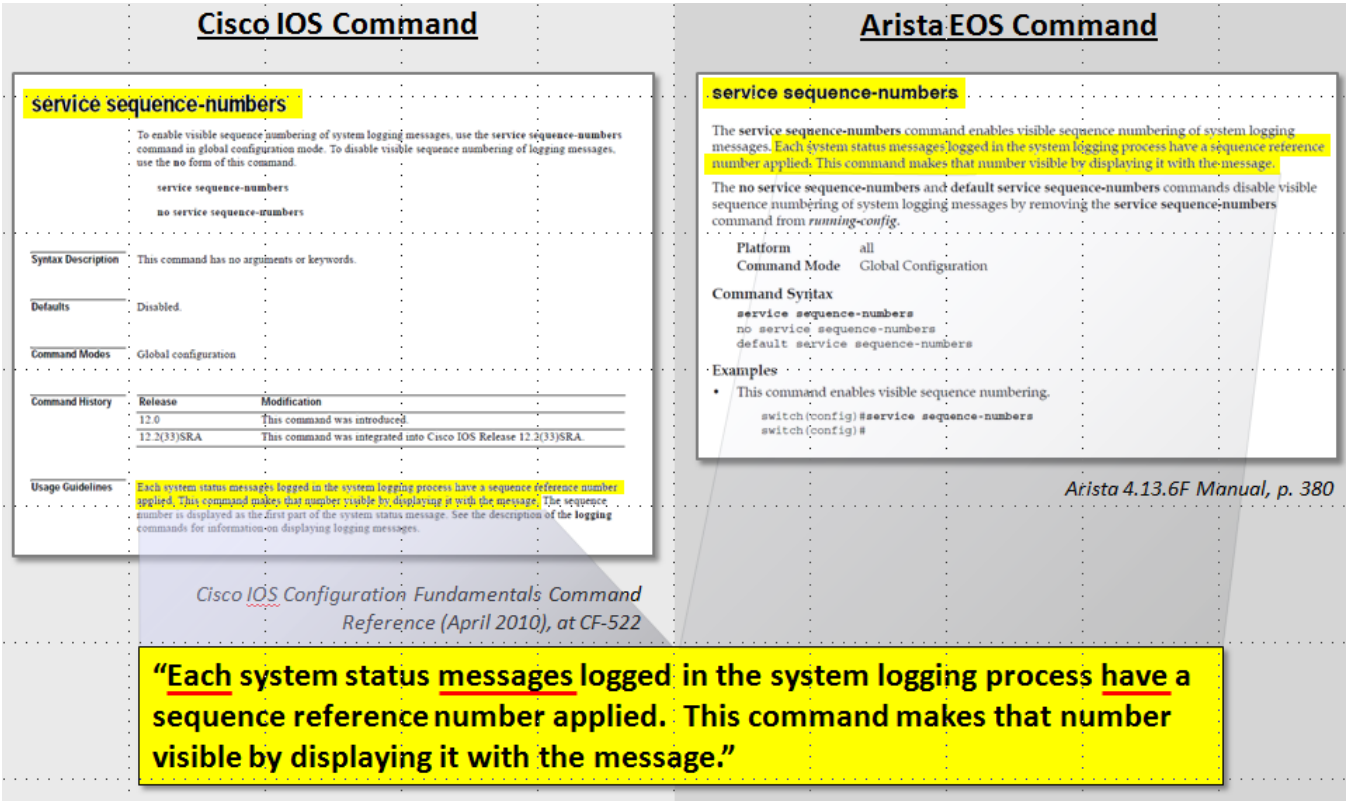
[1] Cisco also owns the IOS name and has licensed it to Apple for use in Apple's mobile devices.

simple single-word commands in a CLI may not be protectable under copyright ("Copy", "Paste", "Delete", for example), in Arista's case the expression and organization of over 500 of the multi-word commands in Cisco's CLI are copied verbatim. This contrasts with far less overlap in the case of other Cisco competitors. Moreover, as described below, the CLI copying is just the tip of the iceberg. Arista's slavish copying of Cisco materials goes far beyond the CLI, including extensive copying of not only Cisco's software, but also Cisco's documentation.

8. Arista's co-founder and current Chief Technology Officer, Kenneth Duda, has likewise touted Arista's copying of Cisco's CLI. Mr. Duda, in fact, explained that Arista decided to "[p]rovide familiar interfaces to ease adoption," including a "***standard*** CLI that … retains familiar management commands" (emphasis added), so much so that "80% [of Arista customers] tell us they appreciate the way they can leverage their deep [Cisco] IOS experience, as they can easily upgrade an aging [Cisco] Catalyst infrastructure to Arista." Mr. Duda also stated:

> "Familiar management interfaces, standard CLI … It's been very helpful for our customers to be able to rapidly adopt our products and integrate them into their environments … [and] that our switches provide a familiar management interface so their existing tools and processes, screen scraping, automation, continue to work just as they did before."

9. As demonstrated by networking products from other vendors, Arista did not need to extensively copy Cisco's creative expression in order to sell a functioning product. By its own admission, Arista copied Cisco in order to take a shortcut to compete with Cisco using Cisco's own technologies, while avoiding the investments in employees, money, and time that would have been needed to develop products based on new technologies. In particular, Arista copied Cisco's software, including the detailed expression, hierarchy, and organization of at least five hundred unique multi-word commands from Cisco's CLI, examples of which are included in attached Exhibit 1. Arista also copied extensively from Cisco IOS documentation, in many cases copying portions of text verbatim from Cisco IOS documentation such as user guides and manuals, including down to typos. For example:



Additional examples of Arista's copying of Cisco's IOS documentation are included in attached Exhibit 2.

10. Arista has caused significant and irreparable harm to Cisco by incorporating Cisco's technologies into Arista's products and by telling customers that a primary benefit of using those products is that they are just like Cisco's.

11. Arista's actions also significantly harm innovation. If Arista's copying allows it to avoid what is needed to develop new technologies, other companies will be encouraged to simply copy others' proprietary technologies rather than to hire engineers, invest in innovation, and develop new technologies. That result would significantly threaten the American economy and global innovation.

12. Cisco welcomes legitimate competition in the marketplace. Its executives have written and spoken in support of employee mobility, and Cisco believes strongly and has stated that allowing people to move freely between companies fosters innovation.[2] But Arista has unlawfully and

[2] Cisco, Cisco Blog - The Platform, "Employee Mobility," *available at* http://blogs.cisco.com/tag/employee-mobility/.

intentionally copied technologies developed by thousands of Cisco engineers in order to take shortcuts, rather than to innovate. Such unlawful behavior stifles innovation and cannot be condoned.

NATURE OF THE ACTION

13. This is a civil action for copyright infringement under the Copyright Laws of the United States, 17 U.S.C. §§ 101 *et seq.*, for patent infringement under the Patent Laws of the United States, 35 U.S.C. §§ 1 *et seq.*, and for such other relief as the Court deems just and proper.

THE PARTIES

14. Plaintiff Cisco Systems, Inc., is a company duly organized and existing under the laws of California, having its principal place of business at 170 West Tasman Drive, San Jose, California 95134.

15. Defendant Arista is a corporation duly organized and existing under the laws of Delaware, having its principal place of business at 5453 Great America Parkway, Santa Clara, California 95054.

JURISDICTION

16. This civil action asserts claims arising under the Copyright Laws of the United States, 17 U.S.C. §§ 101 *et seq.*, and the Patent Laws of the United States, 35 U.S.C. §§ 1 *et seq*. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

17. This Court has personal jurisdiction over Arista. Arista has maintained its principal place of business in the Northern District of California since 2004. Arista also has engaged in substantial and not isolated business activities in the Northern District of California. Specifically, Arista, directly and/or through third parties, has made, used, sold, and/or offered for sale within the Northern District of California and/or imported into the Northern District of California infringing networking products and other works.

VENUE

18. Venue properly lies in this District under 28 U.S.C. §§ 1391 and 1400(b) because Arista's principal place of business is in this District, acts of copyright and patent infringement have been committed in this District, and Arista is subject to personal jurisdiction in this District. In addition, venue is proper because Cisco has suffered harm in this District.

INTRADISTRICT ASSIGNMENT

19. This Complaint includes an Intellectual Property Action, which is an excepted category under Civil Local Rule 3-2(c). Consequently, this action is assigned on a District-wide basis.

GENERAL ALLEGATIONS

CISCO IS THE WORLDWIDE LEADER IN NETWORKING INNOVATIONS

20. Founded in 1984, Cisco is the worldwide leader in developing, implementing, and providing the technologies behind networking products and services. Cisco develops and provides a broad range of networking products and services that enable seamless communication among individuals, businesses, public institutions, government agencies, and service providers. Specifically, the thousands of engineers who work at Cisco develop and provide networking hardware, software, and services that utilize cutting-edge technologies to transport data, voice, and video within buildings, across cities and campuses, and around the world.

21. Since its founding, Cisco has pioneered many of the important technologies that created and enabled global interconnectivity. During the past three decades, Cisco has invested billions of dollars, and the time and dedication of thousands of its engineers, in the research and development of networking products and services, culminating in the development of a highly-successful interface and related technologies that have driven the proliferation of Cisco's computer networking technologies and the Internet.

22. Included in Cisco's products is a highly innovative original operating system CLI that is familiar to users of Cisco's products as well as additional features that are important to the successful deployment of large and small networks based on the demands of today's networking environments. Cisco remains at the forefront of developing cutting-edge networking technologies: in the last fiscal year alone, Cisco invested more than $5 billion in ongoing research and development and employed more than ten thousand engineers in California and elsewhere.

23. Cisco's intellectual property rights, including its copyright and patent rights, protect its valuable operating system, including the interface and other technologies developed by Cisco that are incorporated therein. As a result of its innovations, Cisco has developed a portfolio of hundreds of registered U.S. copyrights, including the copyrights asserted in this action, as well as a substantial patent

portfolio including the two patents asserted in this action.

CISCO'S COPYRIGHTED OPERATING SYSTEM

24. Cisco IOS includes many of Cisco's core technologies, encompassing both patented technologies and also creative expression, including, among other things, proprietary source code, command expressions, organization and command hierarchies, Cisco's CLI, and corresponding screen displays. Cisco IOS, and specifically Cisco's CLI, is recognized by customers and the industry generally as a very important, unique aspect of Cisco's products that contributes tremendously to the success and widespread acceptance of Cisco's products.

25. Cisco owns copyrights in Cisco's IOS and related documentation, many of which are duly recorded and registered with the United States Copyright Office, as reflected by the following registrations and applications: Cisco IOS 11.0 (Reg. No. TXu-1-036-057); Cisco IOS 11.1 (Reg. No. TXu-1-048-569) (supplementing TX-5-531-435); Cisco IOS 11.2 (Reg. No. TXu-1-036-063); Cisco IOS 11.3 (Reg. No. TXu-1-057-804) (supplementing TXu-1-036-062); Cisco IOS 12.0 (Reg. No. TXu-1-057-805) (supplementing TXu-1-036-064); Cisco IOS 12.1 (Reg. No. TXu-1-057-807) (supplementing TXu-1-036-066); Cisco IOS 12.2 (Reg. No. TXu-1-057-806) (supplementing TXu-1-036-065); Cisco IOS 12.3 (Reg. No. TXu-1-188-975); Cisco IOS 12.4 (Reg. No. TXu-1-259-162); Cisco IOS 15.0 (application pending); Cisco IOS 15.1 (application pending); Cisco IOS 15.2 (application pending); Cisco IOS 15.4 (application pending); Cisco IOS XR version 3.0 (Reg. No. TXu-1-237-896); Cisco IOS XR version 3.2 (Reg. No. TXu-1-270-592); Cisco IOS XR Version 3.3 (Reg. No. TXu-1-336-997); Cisco IOS XR Version 3.4 (Reg. No. TXu-1-344-750); Cisco IOS XR version 3.5 (Reg. No. TXu-1-592-305); Cisco IOS XR version 4.3 (Reg. No. TX 7-933-364); Cisco IOS XR version 5.2 (Reg. No. TX 7-933-353); Cisco IOS XE version 2.1 (application pending); Cisco IOS XE version 3.5 (application pending); Cisco NX-OS Release 4.0 (application pending); Cisco NX-OS Release 5.0 (application pending); Cisco NX-OS Release 5.2 (application pending); and Cisco NX-OS Release 6.2 (application pending) (collectively, the "Cisco IOS Copyrighted Works").

26. The Cisco IOS Copyrighted Works are original, creative works and copyrightable subject matter under the laws of the United States. Cisco has complied in all respects with the Copyright Laws

of the United States, and the Register of Copyrights has issued, or Cisco has applied for, Certificates of Registration for each of the Cisco IOS Copyrighted Works. Attached hereto as Exhibits 3-28, and incorporated herein by reference, are true and correct copies of the Certificates of Registration issued by the Copyright Office or pending applications for registration of the Cisco IOS Copyrighted Works. The issued certificates that are attached reflect the date upon which Cisco applied for a Certificate of Registration, the date on which the certificate was issued, and the registration number assigned.

27. As described generally above, a key component of Cisco IOS is the "Command-Line Interface" or CLI. The CLI is the user interface by which users of Cisco products communicate with the product in order to configure and manage the product. Cisco's CLI includes an elaborate taxonomy of unique textual command expressions, authored by Cisco's employees, which a user learns in order to "talk" to the product. When a command is entered by a human operator or computer script, Cisco's CLI interprets the command and performs a particular operation associated with that command. Cisco's CLI also includes an original structure and hierarchy (and naming convention) of command modes and associated prompts, which support various, defined sets of the command expressions.

28. The Cisco IOS Copyrighted Works (including their unique command expressions, and unique command mode structure, prompts, and hierarchies) are original, expressive works that have been developed over many years of creative endeavor by Cisco. Other competing developers of networking products have created their own operating systems that differ from Cisco's—including different command expressions, different hierarchies, and different organizations of those commands—which evidences the many creative choices available to a creator of such works. Indeed, when developing an operating system that includes a command-line interface, the software developer has a range of options in deciding on the structure, sequence, and organization of the interface, including what particular textual command expressions (or names) to compose, the purposes assigned to the commands, and the hierarchy, structure, and naming conventions of the command modes and prompts. The Cisco IOS Copyrighted Works represent numerous creative choices made by Cisco and Cisco's original expression of one particular way to create such an operating system. Cisco has invested tens of thousands of employee-hours in developing its unique operating system, which is protected from

unlawful copying under the Copyright Laws of the United States.

29. Cisco also produces creative and expressive documentation, such as user manuals and guides, to its customers to assist them with the use of Cisco IOS. These manuals and guides describe the details of Cisco IOS, the CLI, and how to configure Cisco's products for use in network operation. Cisco has invested thousands of employee-hours in the preparation of the manuals and guides, each of which is protected from unlawful copying under the Copyright Laws of the United States.

30. Cisco IOS, including Cisco's CLI, has been continuously updated and improved by Cisco over many years to incorporate additional creative expression developed by Cisco, including numerous versions that were uniquely created for different settings and particular Cisco products. Thus, each of the Cisco IOS Copyrighted Works is the product of thousands of hours of Cisco employees' time, and is protected from unlawful copying under the Copyright Laws of the United States.

CISCO'S PATENTED TECHNOLOGIES THAT ARE BASED IN CLI

31. In addition to Cisco's copyrighted works, Cisco also developed and owns a number of patented technologies implemented with Cisco's CLI. Two examples of Cisco's patented technologies that are implemented with Cisco's CLI are described below.

U.S. Patent No. 7,047,526

32. U.S. Patent No. 7,047,526 ("the '526 patent") entitled "Generic Command Interface for Multiple Executable Routines" issued on May 16, 2006, to Jeffrey Wheeler and Paul Mustoe. A true and correct copy of the '526 patent is attached hereto as Exhibit 29.

33. Cisco Systems, Inc., is the owner by assignment of the '526 patent and has the full right to enforce and/or license the '526 patent.

34. The '526 patent is valid and enforceable.

35. The technologies claimed in the '526 patent are implemented with Cisco's CLI and are key features that contribute to the success of Cisco's CLI.

U.S. Patent No. 7,953,886

36. U.S. Patent No. 7,953,886 ("the '886 patent") entitled "Method and System of Receiving and Translating CLI Command Data Within a Routing System" issued on May 31, 2011, to Anil Bansal,

Jung Tjong, Prakash Bettadapur, and Sastry Varanasi. A true and correct copy of the '886 patent is attached hereto as Exhibit 30.

37. Cisco Systems, Inc., is the owner by assignment of the '886 patent and has the full right to enforce and/or license the '886 patent.

38. The '886 patent is valid and enforceable.

39. The technologies claimed in the '886 patent are implemented with Cisco's CLI and are key features that contribute to the success of Cisco's CLI.

ARISTA BLATANTLY AND EXTENSIVELY COPIED CISCO'S CLI

40. Decades after Cisco's founding, former Cisco employees who were intimately and directly familiar with Cisco's unique operating system, CLI, and other pioneering networking technologies, including those protected by the copyrights and patents asserted in this action, started Arista. Since that time, numerous additional Cisco employees who are also intimately familiar with Cisco IOS and other pioneering technologies have taken that knowledge with them to Arista. For example, Arista founder and Chief Development Officer Andreas Bechtolsheim served as Vice President and General Manager of Cisco's Gigabit Systems Business Unit; Arista founder, Chief Technology Officer, and Senior Vice President Kenneth Duda worked at Cisco for several years as a software engineer in Cisco's Gigabit Systems Business Unit; Arista's current President and Chief Executive Officer, Jayshree Ullal, worked at Cisco for more than a decade, including as Senior Vice President of Cisco's Data Center, Switching, and Services Group (which is responsible for some of Cisco's flagship networking product lines); and Arista's former Vice President of Systems Engineering and Technology Marketing, Doug Gourlay, was previously Vice President of Cisco's Marketing Group. Cisco strongly believes, and has repeatedly stated, that mobility of employees between companies fosters innovation.[3] Unlawful copying like that engaged in by Arista stifles innovation, however, and cannot be condoned.

41. Arista personnel, including Bechtolsheim, Ullal, and others, knew that Cisco's

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[3] Cisco, Cisco Blog - The Platform, "Employee Mobility," *available at* http://blogs.cisco.com/tag/employee-mobility/.

proprietary IOS and pioneering networking technologies—including the proprietary expression and technologies covered by the Cisco IOS Copyrighted Works, and by the '526 patent and the '886 patent (collectively, the "Patents-in-Suit")—drive customer demand for Cisco's products. Rather than invest in the expensive and time-consuming effort that would have been necessary to develop its own features for Arista's products, and specifically instead of investing the time and expense of developing its own CLI, Arista decided to simply copy Cisco's unique approach and pioneering proprietary technologies, and even to explicitly tout its copying to the market in attempts to sell Arista products that compete directly with Cisco products.

42. Arista's voluminous, unauthorized, and illegal misappropriation of Cisco technology has been crucial to Arista's attempts to compete with Cisco. By extensively copying Cisco's copyrighted operating system and its patented CLI technologies, Arista took an unlawful shortcut, thereby avoiding the need to make investments that would have been necessary had Arista not copied Cisco's technology. By doing so, Arista has been able to offer a directly competitive product to Cisco IOS, which Arista tells customers substitutes for Cisco's offering in the same product market.

43. Arista personnel—many of whom worked at Cisco at or after the time the technologies were developed by Cisco—were well aware that the unique Cisco CLI that Arista appropriated is protected by U.S. copyrights. By this action, Cisco seeks to stop Arista's willful, unauthorized, and improper use of Cisco's copyrighted works, and to obtain damages for the significant harm caused to Cisco by Arista's copying.

44. Arista has blatantly copied and misappropriated numerous original and distinctive elements of the Cisco IOS in order to compete with Cisco and create Arista's products and related materials, including Arista's Extensible Operating System ("EOS").

45. Arista's President and Chief Executive Officer Jayshree Ullal has stated: "Since I helped build the enterprise, I would never compete with Cisco directly in the enterprise in a conventional way. It makes no sense. ***It would take me 15 years and 15,000 engineers***, and that's not a recipe for

success."[4] In order to avoid the many years and engineers whom Ms. Ullal conceded it would have taken for Arista to compete lawfully with Cisco, Arista decided instead to simply copy significant portions of Cisco's copyrighted operating system, including the expression, organization, and hierarchy of at least several hundred of Cisco's multi-word commands.

46. Ms. Ullal has specifically and publicly acknowledged, and even touted as a selling point of Arista products, that Arista copied Cisco's CLI. For example, Ms. Ullal stated that: "[A] Cisco CCIE expert would be able to use Arista right away, because we have a ***similar command-line interface and operational look and feel***. Where ***we don't have to invent***, we don't."[5]

47. Arista's co-founder and current Chief Technology Officer Kenneth Duda likewise stated that Arista has learned to "***[p]rovide familiar interfaces to ease adoption***" including a "standard ***CLI that … retains familiar management commands***" so much so that "80% [of Arista customers] tell us they appreciate the way they can ***leverage their deep [Cisco] IOS experience***, as they can ***easily upgrade*** an aging [Cisco] Catalyst infrastructure to Arista."[6]

48. Mr. Duda has further stated: "Familiar management interfaces, standard CLI … It's been very ***helpful for our customers to be able to rapidly adopt our products*** and integrate them into their environments … that our ***switches provide a familiar management interface*** so their existing tools and processes, screen scraping, automation, ***continue to work just as they did before***."[7] In fact, when asked "[i]f [customers] just want to take the [Arista] switch, just as they're used to, take it out of the box, plug

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[4] *See, e.g.*, Adam Lashinsky, "An Ex-Cisco Exec Reflects," Fortune (Mar. 20, 2014) (emphasis added), *available at* http://fortune.com/2014/03/20/an-ex-cisco-exec-reflects/.

[5] *See, e.g.*, John Gallant, "How Arista Networks Got Out In Front of the SDN Craze," Network World (Feb. 22, 2013) (emphasis added).

[6] *See, e.g.*, Posting of Kenneth Duda to Arista EOS Central, "Linux as a Switch Operating System: Five Lessons Learned" (Nov. 5, 2013), *available at* https://eos.arista.com/linux-as-a-switch-operating-system-five-lessons-learned/ (emphasis added).

[7] *See, e.g.*, Arista, *EOS Bites & Bytes - Episode 1 - Lessons Learned While Building a Network OS on Top of Linux*, Arista EOS Central - Video Library (Jan. 30, 2014), at 6:55–7:56, *available at* http://eos.arista.com/wp-content/themes/aristaeos/video-lightbox.php?vid=ttp6lavHKGo (emphasis added).

in your console, whatever, SSH in, it's no different," Mr. Duda answered in the affirmative ("Yeah").[8]

49. Arista has made similar statements in its product documentation for EOS. For example, a white paper released by Arista stated "[t]he ***familiar*** EOS command-line interface (CLI) ***avoids retraining costs***."[9]

50. Consistent with its statements to the market, in order to create a directly competing operating system and to make Arista's products more attractive to existing users of Cisco products, Arista has substantially copied Cisco's CLI and infringed Cisco's copyrights in Cisco IOS (including the CLI), including by copying at least several hundred of Cisco's multi-word command expressions, Cisco's command mode structures and prompts, Cisco's command responses, and associated Cisco documentation. The Cisco command expressions, command modes structures and prompts, command responses, and associated user guide documentation copied by Arista were well known to Arista personnel due to their past experiences as Cisco employees, and are accessible through Cisco's website and online documentation, as well as through use of Cisco's products.

51. As described above, Arista EOS copied the expressions, organization, and hierarchies of hundreds of multi-word command expressions from Cisco IOS. Arista copied at least 500 multi-word commands—including the expression, organization, and hierarchies of those commands—from Cisco's CLI, encompassing more than 40% of Arista's multi-word commands. The following chart includes a few representative examples of the multi-word commands copied by Arista:

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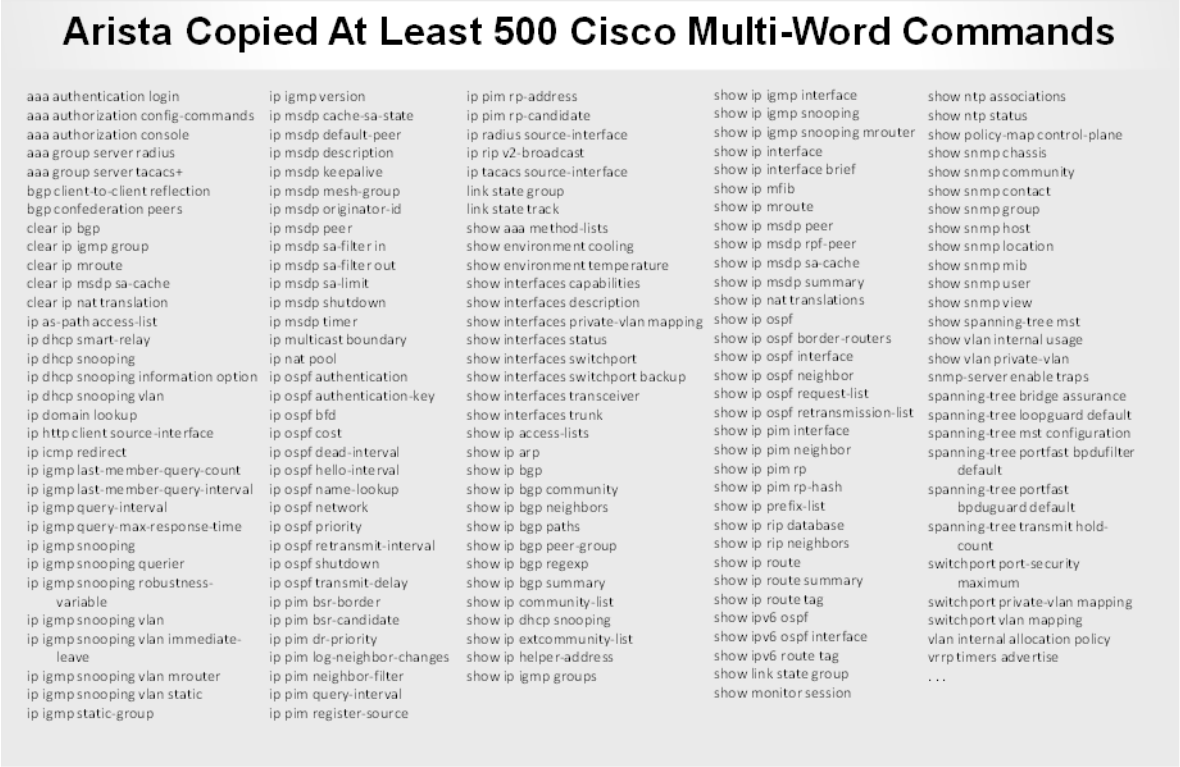
[8] *See, e.g.*, Arista, *EOS Bites & Bytes - Episode 1 - Lessons Learned While Building a Network OS on Top of Linux*, Arista EOS Central - Video Library (Jan. 30, 2014), at 8:12–22, *available at* http://eos.arista.com/wp-content/themes/aristaeos/video-lightbox.php?vid=ttp6lavHKGo.

[9] *See, e.g.*, Arista, *EOS: An Extensible Operating System* (emphasis added).



52. The following list shows examples of Arista's infringement of Cisco's detailed multi-word command expressions and command hierarchies:

- "aaa" command hierarchy (at least 7 matches), including the following exemplary multi-word command(s):
    - "aaa group server radius"
    - "aaa group server tacacs+"
- "bgp" command hierarchy (at least 7 matches), including the following exemplary multi-word command(s):
    - "bgp client-to-client reflection"
- "clear" command hierarchy (at least 16 matches), including the following exemplary multi-word command(s):
    - "clear ip igmp group"
    - "clear ip nat translation"
- "dot1x" command hierarchy (at least 8 matches), including the following exemplary multi-word command(s):

- "dot1x max-reauth-req"

- "ip" command hierarchy (at least 94 matches), including the following exemplary multi-word command(s):
  - "ip as-path access-list"
  - "ip dhcp" sub-hierarchy (at least 5 matches), including the following exemplary multi-word command(s):
    - "ip dhcp snooping"
  - "ip igmp" sub-hierarchy (at least 15 matches), including the following exemplary multi-word command(s):
    - "ip igmp last-member-query-count"
    - "ip igmp static-group"
  - "ip msdp" sub-hierarchy (at least 13 matches), including the following exemplary multi-word command(s):
    - "ip msdp sa-filter in"
  - "ip ospf" sub-hierarchy (at least 13 matches), including the following exemplary multi-word command(s):
    - "ip ospf shutdown"
    - "ip ospf transmit-delay"
  - "ip pim" sub-hierarchy (at least 16 matches), including the following exemplary multi-word command(s):
    - "ip pim dr-priority"
    - "ip pim query-interval"
- "ipv6" command hierarchy (at least 28 matches), including:
  - "ipv6 nd" sub-hierarchy (at least 9 matches), including the following exemplary multi-word command(s):
    - "ipv6 nd managed-config-flag"
    - "ipv6 nd ns-interval"

- "ipv6 ospf" sub-hierarchy (at least 8 matches), including the following exemplary multi-word command(s):
    - "ipv6 ospf cost"

- "neighbor" command hierarchy (at least 22 matches), including the following exemplary multi-word command(s):
    - "neighbor ebgp-multihop"
    - "neighbor route-reflector-client"
- "show" command hierarchy (at least 162 matches), including the following exemplary multi-word command(s):
    - "show aaa method-lists"
    - "show interfaces" sub-hierarchy (at least 9 matches), including the following exemplary multi-word command(s):
        - "show interfaces private-vlan mapping"
    - "show ip" sub-hierarchy (at least 50 matches), including:
        - "show ip bgp" sub-hierarchy (at least 8 matches), including the following exemplary multi-word command(s):
            - "show ip bgp regexp"
        - "show ip mroute"
    - "show ipv6" sub-hierarchy (at least 16 matches), including:
        - "show ipv6 ospf" sub-hierarchy (at least 4 matches), including the following exemplary multi-word command(s):
            - "show ipv6 ospf border-routers"
        - "show ipv6 route" sub-hierarchy (at least 3 matches)
- "snmp-server" command hierarchy (at least 12 matches), including the following exemplary multi-word command(s):
    - "snmp-server location"
- "spanning-tree" command hierarchy (at least 14 matches), including the following exemplary

multi-word command(s):

- "spanning-tree bpduguard"

- "vrrp" command hierarchy (at least 10 matches), including the following exemplary multi-word command(s):
  - "vrrp timers advertise"
- Other command expressions and hierarchies, including, for example the following exemplary multi-word command(s):
  - "banner login"
  - "bfd all-interfaces"
  - "default-information originate (OSPFv3)"
  - "errdisable detect cause link-flap"
  - "interface vlan"
  - "isis priority"
  - "log-adjacency-changes (OSPFv3)"
  - "mac access-group"
  - "redundancy force-switchover"
  - "snmp trap link-status"
  - "spf-interval"
  - "vlan internal allocation policy"

53. A more comprehensive list of Arista's copying of Cisco IOS command expressions are provided in Exhibit 1 to this Complaint.

54. Arista EOS also copied Cisco IOS's command modes and prompts. The following comparison shows examples of Arista's infringement of Cisco's command modes and prompts:

Cisco IOS Command Modes[10]

Command Mode	Access Method	Prompt
User EXEC	Log in.	`Router>`
Privileged EXEC	From user EXEC mode, issue the **enable** command.	`Router#`
Global configuration	From privileged EXEC mode, issue the **configure terminal** command.	`Router(config)#`
Interface configuration	From global configuration mode, issue the **interface** command.	`Router(config-if)#`

Arista EOS Command Modes[11]

The switch includes these command modes:

- **EXEC:** EXEC mode commands display system information, perform basic tests, connect to remote devices, and change terminal settings. When logging into EOS, you enter EXEC mode.

  EXEC mode prompt: `switch>`
- **Privileged EXEC:** Privileged EXEC mode commands configure operating and global parameters. The list of Privileged EXEC commands is a superset of the EXEC command set. You can configure EOS to require password access to enter Privileged EXEC from EXEC mode.

  Privileged EXEC mode prompt: `switch#`
- **Global Configuration:** Global Configuration mode commands configure features that affect the entire system, such as system time or the switch name.

  Global Configuration mode prompt: `switch(config)#`
- **Interface Configuration:** Interface configuration mode commands configure or enable Ethernet, VLAN, and Port-Channel interface features.

  Interface Configuration mode prompt: `switch(config-if-Et24)#`

55. Arista also makes available to customers and prospective customers documentation such as user manuals and guides that explain the function of its networking products that use EOS. In creating Arista's documentation, Arista has copied extensively from Cisco IOS documentation. In many cases, Arista has copied portions of text verbatim from Cisco IOS documentation, even in some instances including grammatical errors, which is direct evidence of Arista's blatant and extensive copying of Cisco's copyrighted works. As a result, and consistent with Arista's copying of Cisco's CLI, significant portions of Arista's documentation are substantially similar to and in many instances precisely the same as Cisco IOS documentation. The following comparison shows an example of Arista's documentation that copies Cisco IOS documentation:

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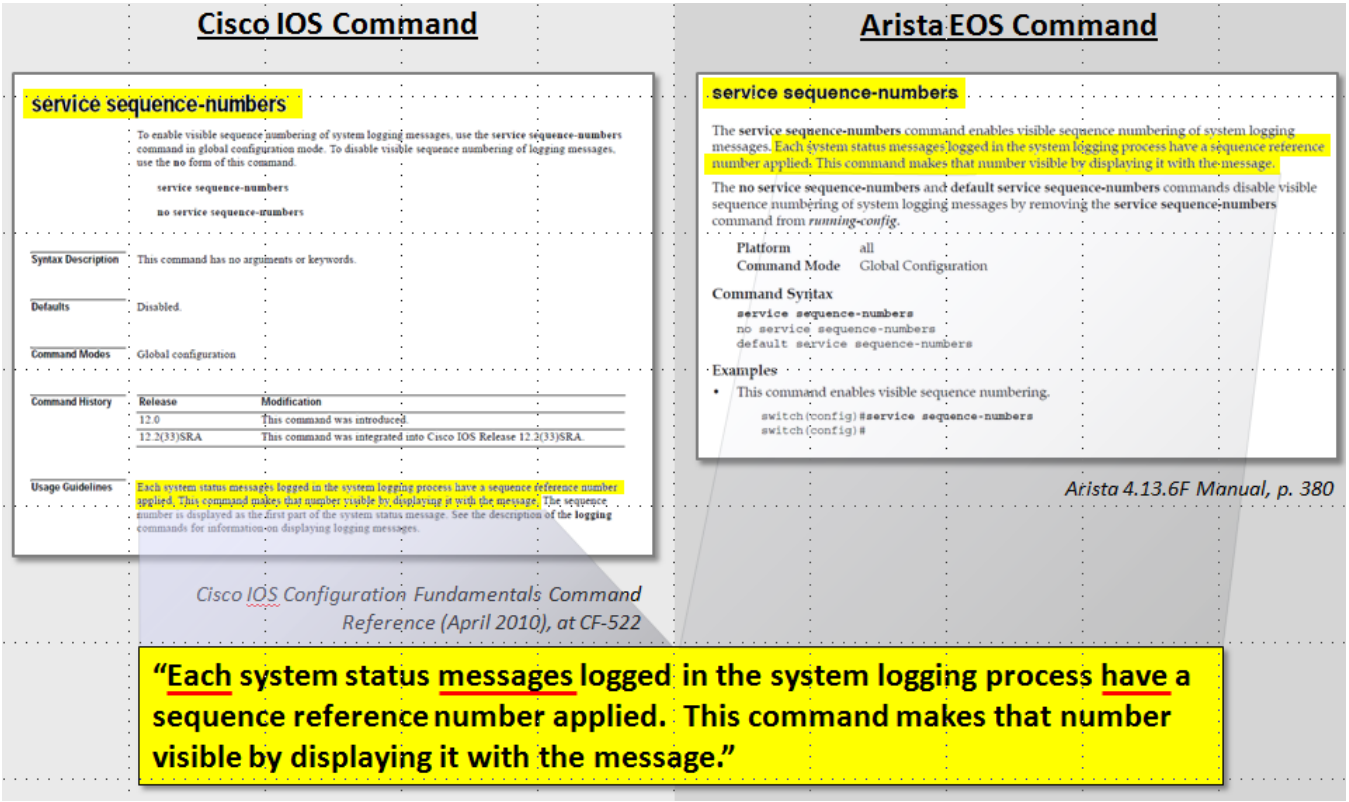
[10] *See, e.g.*, Cisco, Using the Command-Line Interface in Cisco IOS Software, at iii (contained in, *e.g.*, Cisco IOS Interface and Hardware Component Command Reference (Oct. 2009)).

[11] *See, e.g.*, Arista, Arista User Manual (EOS version 4.13.6F, 14 April 2014), at 113 § 3.4.1.



56. The following comparison shows examples of Arista's copying of Cisco IOS documentation such as user manuals and guides:

Cisco IOS Guides	Arista EOS Guide
ip nat source . . . **pool** *name* — Name of the pool from which global IP addresses are allocated dynamically. **overload** — (Optional) Enables the router to use one global address for many local addresses. When overloading is configured, the TCP or User Datagram Protocol (UDP) port number of each inside host distinguishes between the multiple conversations using the same local IP address. *Cisco IOS IP Addressing Services Command Reference, Release 12.4 (2005), at IAD-156*	**ip nat source dynamic** . . . Parameters • *acl_name* Access control list that controls the internal network addresses eligible for NAT. • *POOL_TYPE* Options include: — **overload** Enables the switch to use one global address for many local addresses. When overloading is configured, the TCP or User Datagram Protocol (UDP) port number of each inside host distinguishes between the multiple conversations using the same local IP address. — **pool** *pool_name* The name of the pool from which global IP addresses are allocated dynamically. The pool option is required even if the pool has just one address. NAT uses that one address of all of the translations. *Arista User Manual (EOS Version 4.13.6F), at 1234*
security passwords min-length . . . Usage Guidelines — The **security passwords min-length** command provides enhanced security access to the router by allowing you to specify a minimum password length, eliminating common passwords that are prevalent on most networks, such as "lab" and "cisco." This command affects user passwords, enable passwords and secrets, and line passwords. After this command is enabled, any password that is less than the specified length will fail. *Cisco IOS Security Command Reference, Release 12.4 (2005), at SEC-943*	**password minimum length (Security Management)** The **password minimum length** command provides enhanced security access to the switch by allowing you to specify a minimum password length, eliminating common passwords that are prevalent on most networks. This command affects user passwords, enable passwords and secrets, and line passwords. After this command is enabled, any password that is less than the specified length will fail. Applicable CC Requirements: The switch settings for secure passwords can be found under secure preparation. The password minimum length should be 15 characters and SHA-512 should be used as the hashing mechanism for all locally stored passwords. *Arista User Manual (EOS Version 4.13.6F), at 152*

Cisco IOS Guides	Arista EOS Guide
show ip igmp snooping mrouter To display information on dynamically learned and manually configured multicast router ports, use the **show ip igmp snooping mrouter** command in privileged EXEC mode. **show ip igmp snooping mrouter [vlan** *vlan-id***]** **Syntax Description** **vlan** *vlan-id* (Optional) Specifies a VLAN. Valid values are 1 to 1001. **Command Modes** Privileged EXEC *Cisco IOS IP Multicast Command Reference, Release 12.4 (2005), at IMC-242*	**show ip igmp snooping mrouter** The **show ip igmp snooping mrouter** command displays information on dynamically learned and manually configured multicast router ports. Command provides options to include only specific VLANs. Platform all Command Mode EXEC Command Syntax **show ip igmp snooping mrouter** [*VLAN_ID*] [*DATA*] Parameters • *VLAN_ID* specifies VLAN for which command displays information. Options include: — <no parameter> all VLANs. — **vlan** *v_num* specified VLAN. • *DATA* specifies the type of information displayed. Options include: — <no parameter> displays VLAN number and port-list for each group. — **detail** displays port-specific data for each group; includes transmission times and expiration. *Arista User Manual (EOS Version 4.13.6F), at 1789*
show ip ospf database . . . *link-state-id* (Optional) Portion of the Internet environment that is being described by the advertisement. The value entered depends on the advertisement's LS type. It must be entered in the form of an IP address. When the link state advertisement is describing a network, the *link-state-id* can take one of two forms: The network's IP address (as in type 3 summary link advertisements and in autonomous system external link advertisements). A derived address obtained from the link state ID. (Note that masking a network links advertisement's link state ID with the network's subnet mask yields the network's IP address.) When the link state advertisement is describing a router, the link state ID is always the described router's OSPF router ID. When an autonomous system external advertisement (LS Type = 5) is describing a default route, its link state ID is set to Default Destination (0.0.0.0). *Cisco IOS IP Routing Protocols: Command Reference, Release 12.4 (2005), at IP2R-612-13*	**show ip ospf database <link-state details>** . . . • *linkstate_id* Network segment described by the LSA (dotted decimal notation). Value depends on the LSA type. — When the LSA describes a network, the *linkstate-id* argument is one of the following: The network IP address, as in Type 3 summary link advertisements and in autonomous system external link advertisements. A derived address obtained from the link state ID. Masking a network links the advertisement link state ID with the network subnet mask yielding the network IP address. — When the LSA describes a router, the link state ID is the OSPFv2 router ID of the router. — When an autonomous system external advertisement (Type 5) describes a default route, its link state ID is set to the default destination (0.0.0.0). *Arista User Manual (EOS Version 4.13.6F), at 1404*

57. Additional examples of Arista's copying of Cisco documentation are provided in Exhibit 2.

COUNT I - COPYRIGHT INFRINGEMENT

58. Cisco incorporates and realleges Paragraphs 1 through 57 of this Complaint as if fully set forth herein.

59. By Arista's actions alleged above, Arista has infringed and will continue to infringe the Cisco IOS Copyrighted Works by, *inter alia*, reproducing, distributing, publicly performing, and/or publicly displaying its products (including Arista EOS) and associated documentation, which are substantially similar to and derived from Cisco IOS Copyrighted Works, in violation of Cisco's exclusive rights at least under 17 U.S.C. § 101 *et seq.* without any authorization or other permission from Cisco.

60. Upon information and belief, Arista's infringement of Cisco's copyrights has been deliberate, willful, and in utter disregard of Cisco's rights.

61. Arista has realized unjust profits, gains, and advantages as a proximate result of its infringement.

62. Arista will continue to realize unjust profits, gains, and advantages as a proximate result of its infringement as long as such infringement is permitted to continue.

63. As a direct and proximate result of Arista's willful copyright infringement, Cisco has suffered, and will continue to suffer, monetary loss to its business, reputation, and goodwill. Cisco is entitled to recover from Arista, in amounts to be determined at trial, the damages it has sustained and will sustain, and any gains, profits, and advantages obtained by Arista as a result of Arista's acts of infringement and use and publication of the copied materials.

64. Cisco is entitled to an injunction restraining Arista from engaging in any further such acts in violation of the Copyright Laws of the United States. Unless Arista is enjoined and prohibited from infringing Cisco's copyrights through its infringing products and documentation, Arista will continue to intentionally infringe Cisco's registered copyrights.

65. Cisco is further entitled to recover from Arista damages, including attorneys' fees and costs, it has sustained and will sustain, and any gains, profits, and advantages obtained by Arista as a result of its acts of infringement as alleged above. At present, the amount of such damages, gains, profits, and advantages cannot be fully ascertained by Cisco, but will be established according to proof at trial. Cisco is also entitled to recover statutory damages for Arista's willful infringement of its copyrights.

COUNT II - INFRINGEMENT OF THE '526 PATENT

66. Cisco incorporates and realleges Paragraphs 1 through 65 of this Complaint as if fully set forth herein.

67. The USPTO duly and legally issued the '526 patent on May 16, 2006.

68. Arista has infringed, and continues to infringe, one or more claims of the '526 patent, including at least claim 14, either literally or under the doctrine of equivalents, by making, using,

selling, and/or offering for sale within the United States and/or importing into the United States networking products, including but not limited to the Arista 7010, 7048, 7050, 7050X, 7100, 7150, 7200, 7250X, 7280E, 7300, 7300X, 7500, and 7500E series of switches, including, without limitation, those devices' implementations of functionality underlying Arista's command-line interface.

69. Arista's infringement has caused and is continuing to cause damage and irreparable injury to Cisco, and Cisco will continue to suffer damage and irreparable injury unless and until that infringement is enjoined by this Court.

70. Cisco is entitled to injunctive relief and damages in accordance with 35 U.S.C. §§ 271, 281, 283, and 284.

COUNT III - INFRINGEMENT OF THE '886 PATENT

71. Cisco incorporates and realleges Paragraphs 1 through 70 of this Complaint as if fully set forth herein.

72. The USPTO duly and legally issued the '886 patent on May 31, 2011.

73. Arista has infringed, and continues to infringe, one or more claims of the '886 patent, including at least claim 6, either literally or under the doctrine of equivalents, by making, using, selling, and/or offering for sale within the United States and/or importing into the United States networking products, including but not limited to the Arista 7010, 7048, 7050, 7050X, 7100, 7150, 7200, 7250X, 7280E, 7300, 7300X, 7500, and 7500E series of switches and/or CloudVision, including, without limitation, Arista's devices' implementations of Arista's CloudVision and/or eAPI functionality.

74. Arista's infringement has caused and is continuing to cause damage and irreparable injury to Cisco, and Cisco will continue to suffer damage and irreparable injury unless and until that infringement is enjoined by this Court.

75. Cisco is entitled to injunctive relief and damages in accordance with 35 U.S.C. §§ 271, 281, 283, and 284.

PRAYER FOR RELIEF

WHEREFORE, Cisco prays for relief as follows:

1. For a declaration that Arista has infringed Cisco's copyrights in Cisco IOS Copyrighted

Works;

2. For a declaration that Arista has infringed the ’526 and ’886 patents (collectively, “the Patents-in-Suit”);
3. For a declaration of a substantial likelihood that Arista will continue to infringe Cisco’s intellectual property unless enjoined from doing so;
4. That, in accordance with 17 U.S.C. § 502, Arista and all affiliates, employees, agents, officers, directors, attorneys, successors, and assigns, and all those acting on behalf of or in active concert or participation with any of them, be preliminarily and permanently enjoined from infringing Cisco’s copyrights in Cisco IOS, including in the Cisco IOS Copyrighted Works, including, but not limited to, continuing to publicly display, sell, distribute, offer, market, advertise, promote, or accept customers for Arista’s networking products (including Arista EOS) and documentation (or any other product or work that is substantially similar to Cisco IOS), and from participating or assisting in any such activity;
5. That, in accordance with 35 U.S.C. § 283, Arista, and all affiliates, employees, agents, officers, directors, attorneys, successors, and assigns, and all those acting on behalf of or in active concert or participation with any of them, be preliminarily and permanently enjoined from infringing the Patents-in-Suit;
6. For a declaration that Arista must render a full and complete accounting to Cisco for Arista’s profits, gains, advantages, or the value of business opportunities received from the foregoing acts of infringement;
7. For an award of damages for all damages suffered by Cisco and for any profits or gain by Arista attributable to infringement of Cisco’s copyrights in amounts to be determined at trial;
8. For an award of statutory damages to Cisco based upon Arista’s willful acts of infringement pursuant to the Copyright Laws, 17 U.S.C. § 101 *et seq.*;
9. For an award of damages sufficient to compensate Cisco for Arista’s infringement of the

Patents-in-Suit, including lost profits suffered by Cisco as a result of Arista's infringement and in an amount not less than a reasonable royalty;

10. For an award to Cisco of its reasonable attorneys' fees, expenses, and costs incurred in this action under 17 U.S.C. § 505;
11. For a declaration that this case is "exceptional" under 35 U.S.C. § 285, and an award to Cisco of its reasonable attorneys' fees, expenses, and costs incurred in this action;
12. For an award of prejudgment and post-judgment interest; and
13. For such other and further relief as this Court shall deem appropriate.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Cisco demands a trial by jury on all issues raised by the Complaint.

DATED: December 5, 2014

Respectfully submitted,

/s/ Sean S. Pak

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Appendix of Exhibits

NO.	DESCRIPTION
1	Examples of Copied Cisco Commands
2	Examples of Copied Cisco Documentation
3	U.S. Copyright Registration for Cisco IOS 11.0 (Reg. No. TXu 1-036-057)
4A	U.S. Copyright Registration for Cisco IOS 11.1 (Reg. No. TX 5-531-435)
4B	Supplemental U.S. Copyright Registration for Cisco IOS 11.1 (Reg. No. TXu 1-048-569)
5	U.S. Copyright Registration for Cisco IOS 11.2 (Reg. No. TXu 1-036-063)
6A	U.S. Copyright Registration for Cisco IOS 11.3 (Reg. No. TXu 1-036-062)
6B	Supplemental U.S. Copyright Registration for Cisco IOS 11.3 (Reg. No. TXu 1-057-804)
7A	U.S. Copyright Registration for Cisco IOS 12.0 (Reg. No. TXu 1-036-064)
7B	Supplemental U.S. Copyright Registration for Cisco IOS 12.0 (Reg. No. TXu 1-057-805)
8A	U.S. Copyright Registration for Cisco IOS 12.1 (Reg. No. TXu 1-036-066)
8B	Supplemental U.S. Copyright Registration for Cisco IOS 12.1 (Reg. No. TXu 1-057-807)
9A	U.S. Copyright Registration for Cisco IOS 12.2 (Reg. No. TXu 1-036-065)
9B	Supplemental U.S. Copyright Registration for Cisco IOS 12.2 (Reg. No. TXu 1-057-806)
10	U.S. Copyright Registration for Cisco IOS 12.3 (Reg. No. TXu 1-188-975)
11	U.S. Copyright Registration for Cisco IOS 12.4 (Reg. No. TXu 1-259-162)
12	U.S. Copyright Application for Cisco IOS 15.0
13	U.S. Copyright Application for Cisco IOS 15.1
14	U.S. Copyright Application for Cisco IOS 15.2
15	U.S. Copyright Application for Cisco IOS 15.4
16	U.S. Copyright Registration for Cisco IOS XR version 3.0 (Reg. No. TXu 1-237-896)
17	U.S. Copyright Registration for Cisco IOS XR version 3.2 (Reg. No. TXu 1-270-592)
18	U.S. Copyright Registration for Cisco IOS XR Version 3.3 (Reg. No. TXu 1-336-997)
19	U.S. Copyright Registration for Cisco IOS XR Version 3.4 (Reg. No. TXu 1-344-750)
20	U.S. Copyright Registration for Cisco IOS XR version 3.5 (Reg. No. TXu 1-592-305)
21	U.S. Copyright Registration for Cisco IOS XR version 4.3 (Reg. No. TX 7-933-364)
22	U.S. Copyright Registration for Cisco IOS XR version 5.2 (Reg. No. TX 7-933-353)

NO.	DESCRIPTION
23	U.S. Copyright Application for Cisco IOS XE 2.1
24	U.S. Copyright Application for Cisco IOS XE 3.5
25	U.S. Copyright Application for Cisco NX-OS 4.0
26	U.S. Copyright Application for Cisco NX-OS 5.0
27	U.S. Copyright Application for Cisco NX-OS 5.2
28	U.S. Copyright Application for Cisco NX-OS 6.2
29	U.S. Patent No. 7,047,526
30	U.S. Patent No. 7,953,886