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5 *Pro Se* Plaintiff

6
7 **UNITED STATES DISTRICT COURT**
8 **NORTHERN DISTRICT OF CALIFORNIA**

9)
10 Xiaohua Huang *Pro Se*) Case Number:
11 Plaintiff(s),)
12) **MR. Xiaohua Huang’s amended**
13 vs.) **complaint against Wells Fargo &**
14) **Company for patent infringement**
15 Wells Fargo & Company)
16 Defendant(s)) **Demand for Jury Trial**
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15 Plaintiff Xiaohua Huang (hereinafter “Huang” or “Plaintiff”) alleges as
16 follows:

17 **NATURE OF THE ACTION**

18 1. This is an action for patent infringement arising out of U.S. Patent No.
19 RE 45,259 issued on November 25, 2014 (hereinafter the “259 Reissue”),
20 6,744,653 (hereinafter the “653 Patent”) issued on June 1, 2004, and 6,999,331
21 issued on February 14, 2006 (hereinafter the “331 Patent”) to Xiaohua Huang.
22 This action is brought to remedy the infringement of the ‘259 Reissue ,
23 ‘653Patent and ‘331Patent (collectively “patent-in-suit”) by Defendant Wells
24 Fargo & Company . (hereinafter “Wells Fargo” or “Defendant”).

25 **THE PARTIES**

26 2. Xiaohua Huang is an individual, his current residential address is at 505
27 Cypress Point Drive, Apt. 272, Mountain view, CA 94043. Huang has developed
28 the state of the art high speed and low power U.S. patented TCAM designs to

1 build IC chips used inside of Internet IP Routers(“Routers”), Ethernet
2 Switches(“Switches”) and Data Center Switches etc since the year of 2000.

3
4 3. Wells fargo is or purports to be an corporation with its main offices in
5 420 Montgomery Street, San Francisco, CA 94163,United States with contact
6 telephone number 866-878-5865. Wells fargo has used Routers Switches and
7 Data Center Switches to generate its revenues in the United States.

8 **JURISDICTION AND VENUE**

9 4. This action arises under the patent laws of the United States, 35 U.S.C. §
10 101, *et seq.* This Court has jurisdiction over the subject matter of this action
11 pursuant to 28 U.S.C. §§ 1331 and 1338(a). Venue is proper in this District
12 pursuant to 28 U.S.C. §§1391(b) - (c) and 1400(b) in that Defendant has been
13 generating revenues and profits through using “Switches”, “Routers” and Data
14 Center Switches which infringes the ‘259 Reissue and the ‘653 and ‘331 Patents
15 within Northern California.

16 **BACKGROUND FACTUAL ALLEGATION**

17 5. A true and correct copy of each of the ‘259 Reissue, the ‘653 and ‘331
18 Patents are attached hereto as Exhibits A, B and C respectively. The ‘259
19 Reissue, the ‘653 Patent and ‘331 Patent are valid and owned by Plaintiff Mr.
20 Huang as the inventor.

21 6. In Nov. 2000 “Huang” found CMOS Micro Device Inc (“CMOS”) to
22 develop Ternary Content Addressable Memory (TCAM). “Huang” is the owner of
23 “CMOS”, “CMOS” is a California corporation and having its office in 900 East
24 Hamilton Ave, Room 100, Campbell, California. TCAM are used to perform
25 the search function in internet networking router, switches and Data Center
26 Switches.

27 7. In Oct. 2001 “Huang” filed the provisional patent application titled
28 “High-speed and low power content addressable memory (CAM) sensing
circuits”, some content of which was granted as US patent 6744653 “CAM cells

1 and differential sense circuit for content addressable memory (CAM)” in June 1,
2 2004 and US patent 6999331 “CAM cells and differential sense circuit for
3 content addressable memory (CAM)” in Feb. 14, 2006. In March 4, 2004, Huang
4 filed provisional patent application titled “Hit Ahead hierarchical scalable
5 priority encoding logic and circuit” which was granted as US patent 7652903
6 “Hit Ahead hierarchical scalable priority encoding logic and circuit” in January
7 26, 2010 and RE45259 in November 25, 2014.

8 8. From November, 2000 to April, 2002, Huang finished the design of
9 ternary content addressable memory (TCAM) with 0.18um TSMC technology
10 which are covered by the ‘259 Reissue, the ‘653 and ‘331 Patents. The TCAM
11 designed by Huang is three times faster in speed and consume much less power
12 than the same products in Market at that time. Then Huang shared his patent
13 application with two Cisco executives, they are GM and VP of Router and Gigabit
14 switches division respectively. They both consider that Huang’s patents of
15 TCAM are the best solution among all the vendors and asked Huang to review
16 their next generation TCAM specification and do a feasible design to evaluate
17 the possible product performance. The design data provided by Huang is still
18 better than the best products in market today. ‘653 Patent, ‘331 Patent and
19 ‘259 RE are the basic fundamentals to design high speed and low power TCAM
20 used in internet Router and Switches as well as Data Center Switches up to
21 today. The TCAM designed by Huang provide the example design using those
22 three patents (‘653, ‘331 Patent and ‘259 RE). By using the three patents
23 ‘653 Patent, ‘331 Patent and ‘259 RE the TCAM used in Routers and Switches
24 helps Internet transfer information Hundreds of time faster.

25 9. The patented TCAM IP developed by Huang has been recognized by the
26 industry. In 2003 Huang was an invited speaker to present his TCAM design at
27 networking symposium at Boston organized by the Industry Authority Linley
28

1 Group. In 2015 Huang was also a presenter of MEMCON 2015 in Santa Clara
2 convention center to present his patented TCAM design.

3 10. The ternary content addressable memory component are used as table
4 look up function and used in internet router and switches as well as data center
5 switches to perform table look up to realize access control list(ACL), Quality of
6 Service(QoS), VLAN, LPM and other parallel searching. Hierarchical priority
7 encoding is the fundamental and the only method to achieve high speed look up
8 for large amount content table look up. The RE45259 patent describe the “Hit
9 ahead hierarchical scalable priority encoding logic and circuit” of content
10 addressable memory. The claim 1 of ‘259Reissue is that “ the content
11 addressable memory are divided into many blocks which is arranged in column
12 and row, each block has its own priority encoding logic and perform priority
13 encoding parallel and generate the least significant portion of address, in the
14 same time, the blocks in each column will perform priority encoding to generate
15 the address of corresponding to the block, and the priority encoding are
16 performed among the columns to generate the more significant portion of the
17 address”. In this way the larger content table can be looked up very quickly and
18 the searched address are generated hierarchically. The data sheet of Broadcom
19 TCAM chip describes the same method. From 2014 to 2018 through reverse
20 engineering of several Broadcom’s TCAM chips(Internal coded Knowledge
21 Based Processor(KBP), Including IDT75K72234, IDT75S10005, IDT75S10010,
22 NL9512 and NLN5E5512 Huang found that the claim1,7, 13 and 29 of
23 ‘259Reissue and several other claims read several Broadcom’s TCAM chips
24 (Exhibit T) . After reverse several TCAM chips of Broadcom, the chips are
25 designed same as the claims in ‘259Reissue. As seen in ExhibitT, so the TCAM
26 chips of Broadcom including but not limited to NetLogic75K72234S200BL,
27 NetLogic75S10005A , NetLogic NL 9512 SVH-250I, NL N5E5512, NL71024 and
28 NL7512, NL6512, NL6256, NL6128, NL10x ,NLA10x product families , NL9x

1 and NLA9x product families, NLA1200, BCM15000, NL88650, NL11000,
2 BCM52311) all read the claims 1,7,13 and 29 of '259Reissue. From 2017 to 2018
3 Mr. Huang made reverse engineering to the TCAM chips of Renesas, including
4 but not limited to R8A20400 which read at least claim 1, 7 of '259Reissue. In
5 fact the TCAM chips of Renesas (including but not limited to R8A20400,
6 R8A20410, R8A20610, R8A20611, R8A20646, R8A20686 etc) infringes the claim
7 1, 7,13 and 29 of US patent RE45259.

8 11. The above TCAM chips of Broadcom Inc. and Renesas have been used in
9 the Routers and Switches products for the company including ZTE, Cisco, HPE,
10 Dell, Ericsson, Juniper, Netgear, D-link, IBM etc. So the Routers and Switches
11 products for the company including ZTE, Cisco, HPE, Dell, Ericsson, Juniper,
12 Netgear, D-link, IBM etc infringes the claim 1, 7,13 and 29 of US patent
13 RE45259.

14 12. Based on information (Data sheet, reverse engineering and
15 information obtained) and believe Huang found that the "TCAM IP" used in the
16 networking chips designed in ZTE's chips, Cisco's chips, Ericsson's chip, HPE's
17 chips, Mellanox's chips, Microchip's chips. Qualcomm's chips, Juniper's chips,
18 Texas Instrument's chips, NXP's chips, Marvell's chips, Broadcom's chips and
19 Nephos' chips have the following feature:
20

21 (a) Valid bit for each row to indicate whether the content stored in this row are
22 valid for search or not.
23

24 (b) Use a differential sense amplifier to sense match line signal.

25 (c) Use dummy line to be reference to match line.

26 (d) Local hit signal generation and global hit signal generation of Match
27 signal.
28

1 (e) Priority Encoder which has multi-level priority encoding.

2 (f) High speed: for example, “Silicon proven search speed above 400 MSPS for
3 256X144 density (65nm process)”, 740 Million Search per second for 256x144
4 (40 nm process), 1.0G Search per second for 1Kx160 bit (28nm process).

5
6 The “TCAM IP” above infringes the claims of US patents 6744653, 6999331 and
7 RE45259, including but not limited to the claim 1, 5, 8, 12,15 of US patent
8 6744653, claim 1 and 9 of US patent 6999331 and claim 13, 29 of US patent
9 RE45259 based on Exhibit T. All those chips have been used in the Routers
10 and Switches products of the company including ZTE, Cisco, HPE, Dell,
11 Ericsson, Juniper, D-link Netgear and IBM etc. So the Routers and Switches
12 products of the company including ZTE, Cisco, HPE, Dell, Ericsson, Juniper, D-
13 link, Netgear and IBM etc. have infringed the claim1, 5, 8, 12,15 of US patent
14 6744653, claim 1and 9 of US patent 6999331 and claim 13, 29 of US patent
15 RE45259.
16
17

18 13. Mr. Huang informed several company including but not limited to
19 Broadcom and a company which provide TCAM IP to Huawei, Broadcom and
20 Texas Instrument etc. that its TCAM have infringed US patent RE45259,
21 6744653 and 6999331. So those company’s infringement of “patent-in-suit” is
22 willful.

23 14. Despite the willful infringement those company have sold the “switches”
24 to Wells Fargo company and through product data sheet and application notes
25 to instruct Wells Fargo company to use the “ACL” , “QoS” etc. function of
26 “switches” and “router” which use TCAM and have induced Wells Fargo to
27 directly infringe the “patent-in-suit”.

28 15. The most function, such as AcL, QoS, VLAN and LPM, of “Router” and

1 “Switches” use TCAM lookup. Through using “Switches” Wells Fargo has
2 conducted the act of direct infringement.

3 **THE INFRINGING PRODUCTS WHICH WELLS FARGO MAY**
4 **HAVE USED**

5 16. Wells Fargo is a company which has used networking Router, Switches
6 to build network among its branches and ATM platform. Wells Fargo has a
7 large network and data center which have used network Routers , Switches and
8 data center Switches. Those network Routers, Switches and data center
9 Switches may be purchased from one or some of the following company: ZTE,
10 Cisco, HPE, Dell, Ericsson, Juniper, D-link Netgear and IBM etc.

11 17. ZTE’s Switches and Routers includes but not limited to : ZXR10
12 8900E series core switches ,ZXR10 8900 Series Terabit MPLS Routing
13 Switch ,ZXR10 5960 Series All 10Gigabit Switch ,ZXR10 5900E Series Easy-
14 Maintenance MPLS Routing Switch ,ZXR10 5950-H series All
15 Gigabit Intelligent Routing Switches ,ZXR10 5250 Series All Gigabit Intelligent
16 Switch, ZXR10 3900E Series Easy-Maintenance Routing Switch , ZXR10
17 M6000-S Series Multi-services Edge Router.

18 19. Cisco’s Switches and Routers includes but not limited to :

- 19 Cisco Catalyst 9400 Series Switches
- 20 Cisco Catalyst 9300 Series Switches
- 21 Cisco Catalyst 9200 Series Switches
- 22 Cisco Catalyst 4500 Series Switches
- 23 Cisco Catalyst 3850 Series Switches
- 24 Cisco Catalyst 3650 Series Switches
- 25 Cisco Catalyst 2960-L Series Switches
- 26 Cisco Catalyst 2960-Plus Series Switches
- 27 Cisco Catalyst 2960-X Series Switches
- 28 Cisco Catalyst 9500 Series Switches

- 1 Cisco Catalyst 6800 Series Switches
- 2 Cisco Catalyst 6500 Series Switches
- 3 Cisco Catalyst 6500 Virtual Switching System 1440
- 4 Cisco Catalyst 4900 Series Switches
- 5 Cisco Catalyst 4500 Series Switches
- 6 Cisco Catalyst 4500-X Series Switches
- 7 Cisco Catalyst 3850 Series Switches
- 8 Cisco Nexus 7000 Series Switches
- 9 Cisco Catalyst 3560-CX Series Switches
- 10 Cisco Catalyst 2960-C Series Switches
- 11 Cisco Catalyst 2960-CX Series Switches
- 12 Cisco Catalyst 2960-L Series Switches
- 13 Cisco Nexus 9000 Series Switches
- 14 Cisco Nexus 7000 Series Switches
- 15 Cisco Nexus 6000 Series Switches
- 16 Cisco Nexus 5000 Series Switches
- 17 Cisco Nexus 4000 Series Switches
- 18 Cisco Nexus 3000 Series Switches
- 19 Cisco Nexus 2000 Series Fabric Extenders
- 20 Cisco Catalyst 6500 Series Switches
- 21 Cisco Catalyst 4900 Series Switches
- 22 Cisco 2500 Series Connected Grid Switches
- 23 Cisco Embedded Service 3300 Series Switches
- 24 Cisco Embedded Service 2020 Series Switches
- 25 Cisco Industrial Ethernet 5000 Series Switches
- 26 Cisco Industrial Ethernet 4010 Series Switches
- 27 Cisco Industrial Ethernet 4000 Series Switches
- 28 Cisco Industrial Ethernet 3010 Series Switches

- 1 Cisco Industrial Ethernet 3000 Series Switches
- 2 Cisco Industrial Ethernet 2000 Series Switches
- 3 Cisco Industrial Ethernet 2000U Series Switches
- 4 Cisco Industrial Ethernet 1000 Series Switches
- 5 Cisco SFS 7000 Series InfiniBand Server Switches
- 6 Cisco SFS 3500 Series Multifabric Server Switches
- 7 Cisco SFS 3000 Series Multifabric Server Switches
- 8 Cisco 550X Series Stackable Managed Switches
- 9 Cisco 350 Series Managed Switches
- 10 Cisco 350X Series Stackable Managed Switches
- 11 Cisco 250 Series Smart Switches
- 12 Cisco 220 Series Smart Switches
- 13 Cisco ESW2 Series Advanced Switches
- 14 Cisco Small Business 300 Series Managed Switches
- 15 Cisco Small Business 200 Series Smart Switches
- 16 Cisco Small Business 110 Series Unmanaged Switches
- 17 Cisco Catalyst 6500 Series Switches
- 18 Cisco Catalyst 4500 Series Switches
- 19 Cisco ME 4900 Series Ethernet Switches
- 20 Cisco Catalyst 3750 Metro Series Switches
- 21 Cisco ME 1200 Series Carrier Ethernet Access Devices
- 22 Cisco Cloud Services Platform 2100
- 23 Cisco Nexus 1000V InterCloud
- 24 Cisco Nexus 1000V Switch for KVM
- 25 Cisco Nexus 1000V Switch for Microsoft Hyper-V
- 26 Cisco Nexus 1000V Switch for VMware vSphere
- 27 Cisco Nexus 1000VE Virtual Switch
- 28 Cisco Cloud Services Router 1000V Series

- 1 Cisco IGX 8400 Series Switches
- 2 Cisco MGX 8900 Series Switches
- 3 Cisco MGX 8850 Software
- 4 Cisco MGX 8800 Series Switches
- 5 Cisco MGX 8250 Software
- 6 Cisco MGX 8200 Series Edge Concentrators
- 7 Cisco 4000 Series Integrated Services Routers
- 8 Cisco 1900 Series Integrated Services Routers
- 9 Cisco 1800 Series Integrated Services Routers
- 10 Cisco 1000 Series Integrated Services Routers
- 11 Cisco 800 Series Routers
- 12 Cisco ASR 1000 Series Aggregation Services Routers
- 13 Cisco Carrier Routing System
- 14 Cisco Catalyst 6500 Series Switches
- 15 Cisco Nexus 7000 Series Switches
- 16 Cisco 2000 Series Connected Grid Routers
- 17 Cisco 1000 Series Connected Grid Routers
- 18 Cisco 900 Series Industrial Routers
- 19 Cisco 800 Series Industrial Integrated Services Routers
- 20 Cisco 500 Series WPAN Industrial Routers
- 21 Cisco 5900 Series Embedded Services Routers
- 22 Cisco 5000 Series Enterprise Network Compute System
- 23 Cisco Network Convergence System 6000 Series Routers
- 24 Cisco ASR 9000 Series Aggregation Services Routers
- 25 Cisco ASR 1000 Series Aggregation Services Routers
- 26 Cisco ASR 920 Series Aggregation Services Router
- 27 Cisco ASR 901 Series Aggregation Services Routers
- 28 Cisco ASR 900 Series Aggregation Services Routers

1 Network Convergence System 500 Series Routers
2 Cisco 1900 Series Integrated Services Routers
3 Cisco 800 Series Routers
4 Cisco ASR 1000 Series Aggregation Services Routers
5 Cisco Catalyst 6500 Series Switches
6 Cisco Network Convergence System 5500 Series
7 Cisco Network Convergence System 5000 Series

8 20. HPE's Switches and Routers includes but not limited to :

9 HPE FlexNetwork 5510 HI Switch Series
10 HPE FlexFabric 5700
11 HPE FlexFabric 5800
12 HPE FlexFabric 5940
13 HPE FlexFabric 5950
14 HPE FlexFabric 12900E
15 HPE FlexFabric 12900E Switch Series
16 HPE-Router

17 21. Dell's Switches and Routers includes but not limited to: Brocade M5424,
18 Dell Networking Z Series, Dell Networking S Series 1gbe , Dell Networking X-
19 Series, Dell EMC Networking N1100 Series ,Dell Networking N1500 Switches ,
20 Dell Networking N2000 Series, Dell Networking N3000 Series, Dell Networking
21 N4000 Series ,Dell Networking C9000 Series ,SonicWall NSA
22 Series ,SonicWALL TZ Series.

23 22. Ericsson's Switches and Routers includes but not limited to:
24 Router 6274, Router 6371, Router 6471, Router 6672, Router 6675, Router 8801.

25 23. Juniper's Switches and Routers includes but not limited to :
26 MX5,MX10,MX40,MX80,MX104,MX150,MX204,MX240,MX480,MX960,MX2008,
27 MX2010,MX2020, MX10003,MX10008 and
28

1 MX10016,PTX1000,PTX3000,PTX5000, PTX10001,PTX10002,PTX10008 and
2 PTX10016, T4000 Core Router.

3 24. D-link's Switches and Routers includes but not limited to : DXS-3600,
4 DXS-3400, DGS-3630 ,DGS-3120, DGS-3630 Series, DXS-3400 Series, DXS-3600
5 Series, DGS-3120 Series, DGS-1210/ME Series, DGS-3130 Series, DGS-3130-
6 30PS,DGS-3130-54TS,DGS-3130-54S,DGS-3630-52TC,DGS-3130-54PS,DGS-
7 3630-28PC,DGS-363028SC, DGS-3630-28TC, DXS-3400-24TC , DXS-3400-24SC.

8 25. Netgear's Switches and Routers includes but not limited to: M4200
9 Series, M4300 Series, M4100 Series, M5300 Series, M6100 Series, M7100 Series,
10 M7300 Series.

11 26. IBM's Switches and Routers includes but not limited to:
12 Ethernet Switches (7120-24E, 7120-24L, 7120-48E, 7120-64C, 8831-00M, 8831-
13 00M, 8831-S48, 8831-NF2, 8831-S52), Infinity Band Switches (8828-E36, 8828-
14 E37, 8828-ED0, 8828-ED1, 8828-ED2, 8831-F36, 8831-F37, 8867-FM1, 8867-
15 FM2, 8828-E36, 8828-E36, 8828-ED0, 8828-ED1, 8828-ED2, 8831-F36, 8831-
16 F37, 8867-FM1, 8867-FM2.), Storage Networking Switches (SAN512B-6,
17 SAN256B-6,SAN384C-6, SAN192C-6, SAN768B-2 , SAN384B-2, SAN64B-6,
18 SAN96B-5, SAN48B-5, SAN32C-6, SAN24B-6, SAN24B-5, SAN24B-4 ,
19 SAN50C-R,SAN42B-R, SAN06B-R).

20 27. All products in the above from paragraph 17 to paragraph 26 use
21 either/both "TCAM IP" or /and TCAM chips to perform the ACL, QoS, VLAN,
22 LPM and other parallel searching , filtering and access control functions
23 based on its data sheet or application notes. The TCAM chips inside those
24 "Router" and "Switches" are from Broadcom Inc. or Renesas, those products
25 have infringed the claim 1,7,13 and 29 of Patent RE45259. The "TCAM IP"
26 inside those "Switches" and "Routers" have infringed the claim 1,5,8,12 and
27 15 of patent 6744653 , the claim 1 and 9 of patent 6999331 and claim 13 and
28 29 of RE45259 Reissue patent at least. The network and Data center platform

1 of Wells Fargo may have used some of the Routers and Switches listed from
2 paragraph 17 to paragraph 26 above , so Wells Fargo may have infringed the
3 claim 1,7,13 and 29 of Patent RE45259, the claim 1,5,8,12 and 15 of patent
4 6744653 and the claim 1 and 9 of patent 6999331 at least. Based on Exhibit O
5 that Wells Fargo hired the engineers who knows Cisco and HP products
6 including Switch, Router, communication protocol and software systems, so Wells
7 Fargo at least has used Cisco and HP networking products.

8 **COUNT I : INFRINGEMENT OF U.S. PATENT NO. RE45259**

9 28. Plaintiff refers to and incorporates herein the allegations of
10 Paragraphs 1-27 above.

11 29. On November 25, 2014, U.S. Patent No. RE45259 (the “259Reissue”)
12 was duly and legally issued for a “Hit Ahead hierarchical scalable priority
13 encoding logic and circuit.” A true and correct copy of the ‘259Reissue patent is
14 attached hereto as Exhibit A. Xiaohua Huang as inventor is the owner of all
15 rights, title, and interest in and to the ‘259Reissue patent. U.S. Patent No.
16 RE45259 is the reissue of U.S. Patent No. 7652903 which was duly and legally
17 issued on Jan. 26, 2010. Xiaohua Huang as inventor is the owner of all rights,
18 title, and interest in and to the U.S. Patent No. 7652903.

19 30. On information and belief, Defendant Wells Fargo has infringed and
20 continue to infringe directly, indirectly, literally or Under Doctrine of equivalent
21 one or more of the claims of the ‘259Reissue patent through using the
22 Networking Routers and Switches as well as data center Switches of the
23 following company: ZTE, Cisco, HPE, Dell, Ericsson, Juniper, D-link Netgear
24 and IBM etc. Those Networking Routers and Switches using either/Both “TCAM
25 IP” or/and TCAM chips have infringed at least claim 1,7,13 and 29 of the
26 ‘259Reissue patent under 35 U.S.C. § 271(a), (b) and (c). Defendant Wells Fargo
27 has infringed at least claim 1, 7, 13 and 29 of the ‘259Reissue patent under 35
28 U.S.C. § 271(a),(b) and(c).

1 31. Defendant Wells Fargo's acts of infringement have caused
2 damage to Xiaohua Huang, and Xiaohua Huang is entitled to recover from
3 Defendant Wells Fargo for the damages sustained by Xiaohua Huang as a
4 result of Defendant Wells Fargo's wrongful acts in an amount subject to proof at
5 trial. Defendant Wells Fargo's infringement of Xiaohua Huang exclusive rights
6 under the '259 Reissue patent will continue to damage Xiaohua Huang,
7 causing irreparable harm for which there is no adequate remedy at law, unless
8 enjoined by this Court. Defendant Wells Fargo's infringement entitle Xiaohua
9 Huang to recover damages under 35 U.S.C. § 284 and to attorneys' fees and
10 costs incurred in prosecuting this action under 35 U.S.C. § 285.

11 **COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6744653**

12 32. Plaintiff Mr. Huang refers to and incorporates herein the allegations of
13 Paragraphs 1-27 above.

14 33. On June 1, 2004, U.S. Patent No. 6744653 (the "653 Patent") was duly and
15 legally issued for a "CAM cells and differential sense circuit for content
16 addressable memory (CAM)." A true and correct copy of the '653 patent is
17 attached hereto as Exhibit B. Xiaohua Huang as inventor is the owner of all
18 rights, title, and interest in and to the '653 patent.

19 34. On information and belief, Defendant Wells Fargo has infringed and
20 continue to infringe directly, indirectly, literally one or more of the claims of the
21 '653 patent through using the Networking Routers and Switches as well as data
22 center Switches of the following company: ZTE, Cisco, HPE, Dell, Ericsson,
23 Juniper, D-link Netgear and IBM etc. Those Networking Routers and Switches
24 using either/Both "TCAM IP" or/and TCAM chips have infringed at least claim 1,
25 5, 8, 12 and 15 of the '653 patent under 35 U.S.C. § 271(a), (b) and (c). Defendant
26 Wells Fargo has infringed at least claim 1, 7, 13 and 29 of the '259 Reissue
27 patent under 35 U.S.C. § 271(a), (b) and (c).
28

1 35. Defendant Wells Fargo's acts of infringement have caused damage to
2 Xiaohua Huang, and Xiaohua Huang is entitled to recover from Defendant
3 Wells Fargo for the damages sustained by Xiaohua Huang as a result of
4 Defendant Wells Fargo's wrongful acts in an amount subject to proof at trial.
5 Defendant Wells Fargo's infringement of Xiaohua Huang exclusive rights under
6 the '653 patent will continue to damage Xiaohua Huang, causing irreparable
7 harm for which there is no adequate remedy at law, unless enjoined by this
8 Court. Defendant Wells Fargo's infringement entitle Xiaohua Huang to recover
9 damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in
10 prosecuting this action under 35 U.S.C. § 285.

11 **COUNT III: INFRINGEMENT OF U.S. PATENT NO. 6999331**

12 36. Plaintiff refers to and incorporates herein the allegations of Paragraphs
13 1-17 above.

14 37. On Feb.14, 2006, U.S. Patent No. 6999331(the " '331Patent") was duly
15 and legally issued for a "CAM cells and differential sense circuit for content
16 addressable memory(CAM)." A true and correct copy of the '331 patent is
17 attached hereto as Exhibit C. Xiaohua Huang as inventor is the owner of all
18 rights, title, and interest in and to the '331 patent.

19 38. On information and belief, Defendant Wells Fargo has infringed and
20 continue to infringe directly, indirectly, literally one or more of the claims of the
21 '331patent through using the Networking Routers and Switches as well as data
22 center Switches of the following company: ZTE, Cisco, HPE, Dell, Ericsson,
23 Juniper, D-link Netgear and IBM etc. Those Networking Routers and Switches
24 using either/Both "TCAM IP" or/and TCAM chips have infringed at least claim 1
25 and 9 of the '331patent under 35 U.S.C. § 271(a), (b) and (c). Defendant Wells
26 Fargo has infringed at least claim 1 and 9 of the '331 patent under 35 U.S.C. §
27 271(a), (b) and (c).
28

1 39. Defendant Wells Fargo's acts of infringement have caused damage to
2 Xiaohua Huang, and Xiaohua Huang is entitled to recover from Defendant
3 Wells Fargo for the damages sustained by Xiaohua Huang as a result of
4 Defendant Wells Fargo's wrongful acts in an amount subject to proof at trial.
5 Defendant Wells Fargo's infringement of Xiaohua Huang exclusive rights under
6 the '331 patent will continue to damage Xiaohua Huang, causing irreparable
7 harm for which there is no adequate remedy at law, unless enjoined by this
8 Court. Defendant Wells Fargo's infringement entitle Xiaohua Huang to recover
9 damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in
10 prosecuting this action under 35 U.S.C. § 285.

11 **JURY DEMAND**

12
13 40. Pursuant to Fed. R. Civ. P. 38(b), Plaintiff Xiaohua Huang requests a
14 trial by jury on all issues.

15 **PRAYER FOR RELIEF**

16 WHEREFORE, Xiaohua Huang prays for the following relief:

- 17 (a). A judgment in favor of Xiaohua Huang that Defendant has infringed and
18 is infringing U.S. Patent Nos. 6744653, 6999331, and RE45259;
19 (b). A judgment that the '653 patent, '331 patent and '259 Reissue are valid and
20 enforceable; (c). An order preliminarily and permanently enjoining Defendant
21 and its subsidiaries, parents, officers, directors, agents, servants, employees,
22 affiliates, attorneys and all others in active concert or participation with any of
23 the foregoing, from further acts of infringement of the '653 patent, '331 patent and
24 '259 Reissue patent;
25 (d). An accounting for damages resulting from Defendant's infringement of
26 the '653 patent, '331 patent and '259 Reissue patent under 35 U.S.C. § 284;
27 (e). An assessment of interest on damages;
28

1 (f). A judgment awarding damages to Xiaohua Huang for its costs,
2 disbursements, expert witness fees, and attorneys' fees and costs incurred in
3 prosecuting this action, with interest pursuant to 35 U.S.C. § 285 and as
4 otherwise provided by law;

5 (g). Such other and further relief as this Court may deem just and equitable.
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7 Dated: April 4, 2019

Respectfully Submitted,

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9
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14 Exhibit A RE45259 Reissue Patent
15 Exhibit B 6744653 Patent
16 Exhibit C 6999331 Patent
17 Exhibit T Expert's report on infringement
18 Exhibit O Wells Fargo's hiring requirement
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