

1 MICHAEL A. SHERMAN (SBN 94783)
 masherman@stubbsalderton.com
 2 JEFFREY F. GERSH (SBN 87124)
 jgersh@stubbsalderton.com
 3 SANDEEP SETH (SBN 195914)
 sseth@stubbsalderton.com
 4 WESLEY W. MONROE (SBN 149211)
 wmonroe@stubbsalderton.com
 5 STANLEY H. THOMPSON, JR. (SBN 198825)
 sthompson@stubbsalderton.com
 6 VIVIANA BOERO HEDRICK (SBN 239359)
 vhedrick@stubbsalderton.com
 7 **STUBBS, ALDERTON & MARKILES, LLP**
 15260 Ventura Blvd., 20th Floor
 8 Sherman Oaks, CA 91403
 Telephone: (818) 444-4500
 9 Facsimile: (818) 444-4520

10 **Attorneys for PersonalWeb Technologies, LLC**

11 UNITED STATES DISTRICT COURT
 12 NORTHERN DISTRICT OF CALIFORNIA
 13 SAN JOSE DIVISION

14 IN RE PERSONAL WEB TECHNOLOGIES,
 15 LLC, ET AL., PATENT LITIGATION

CASE NO.: 5:18-md-02834-BLF

16 AMAZON.COM, INC. and AMAZON WEB
 17 SERVICES, INC.,

CASE NO.: 5:18-cv-00767-BLF

CASE NO.: 5:18-cv-05619-BLF

18 Plaintiffs,

19 v.

20 PERSONALWEB TECHNOLOGIES, LLC,
 21 and LEVEL 3 COMMUNICATIONS, LLC,

22 Defendants.

**DECLARATION OF DR. SAMUEL H.
 RUSS IN SUPPORT OF PERSONALWEB
 TECHNOLOGIES, LLC'S OPPOSITION
 TO MOTION OF AMAZON.COM, INC.,
 AMAZON WEB SERVICES, INC., AND
 TWITCH INTERACTIVE, INC. FOR
 ATTORNEY FEES AND COSTS**

23 PERSONALWEB TECHNOLOGIES, LLC
 24 and LEVEL 3 COMMUNICATIONS, LLC,

25 Counterclaimants,

26 v.

27 AMAZON.COM, INC. and AMAZON WEB
 28 SERVICES, INC.,

Counterdefendants.

Date: August 6, 2020
 Time: 9:00 a.m.
 Dept.: Courtroom 3, 5th Floor
 Judge: Hon. Beth Labson Freeman

PERSONALWEB TECHNOLOGIES, LLC, a

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Texas limited liability company, and
LEVEL 3 COMMUNICATIONS, LLC, a
Delaware limited liability company

Plaintiffs,

v.

TWITCH INTERACTIVE, INC. a Delaware
corporation,

Defendant.

1 I, Dr. Samuel H. Russ, declare as follows:

2 1. I have personal knowledge of the facts contained in this declaration and unless
3 otherwise stated, if called a witness I could and would competently testify thereto.

4 2. I submit this declaration in support of PersonalWeb Technologies, LLC's
5 ("PersonalWeb") Opposition to Motion of Amazon.com, Inc., Amazon Web Services, Inc., and
6 Twitch Interactive, Inc. for Attorney Fees and Costs.

7 3. I received a Ph.D. in Electrical Engineering in 1991 and a Bachelor of Science degree
8 in 1986 in electrical engineering, both from Georgia Institute of Technology. Since 2007, I have
9 been on the faculty of the Electrical and Computer Engineering Department at the University of
10 South Alabama. I have significant education, work, and academic experience since 1991 in the field
11 of computer networking and content delivery over the internet and other networks. For example, I
12 have managed the development of cable set-top boxes, developed pioneering home-networking
13 technology (including a coaxial networking system that won an Engineering and Technology
14 Emmy® Award in 2015), and taught classes in embedded systems and cryptography. Several of my
15 published papers involve the delivery of video over in-home Internet-based wireless and wired
16 networks. I am very familiar with HTTP protocol, having both studied it and worked with it over 25
17 years.

18 4. I am intimately familiar with how to construe patent claims, including claims that are
19 under review by the United States Patent and Trademark Office and the federal courts, and how prior
20 art may affect the validity of a patent. I have served as an expert witness in 33 patent infringement
21 matters for both patent owners and alleged infringers, in litigation, in *Inter Partes* Reviews, in
22 covered business method reviews, and at the International Trade Commission. I have also testified
23 in both depositions and trials in numerous matters in which I have always qualified as an expert
24 witness. Attached hereto as Exhibit 1 is a true and correct copy of my curriculum vitae, which
25 details my experience more extensively and also provides a list of the patent cases on which I have
26 served as an expert witness.

27 5. I was retained by counsel for PersonalWeb in early October 2017 in connection with
28 evaluating and providing my expert opinion as to whether patents in PersonalWeb's patent portfolio,

1 commonly referred to as the “True Name” patents, were infringed by various website operators, and
2 whether the patent claims potentially infringed were valid over the prior art. The technology
3 involved in the potential infringement I was asked to study is similar to the technologies involved in
4 my prior expert engagements discussed above.

5 6. My initial task was to evaluate and provide my expert opinion regarding how various
6 prior art cited in post-grant proceedings affected the validity of various claims in the True Name
7 patents, including claims 38 and 42 of U.S. Patent No. 5,978,791 (the ’791 patent); claims 20, 69 and
8 71 of U.S. Patent No. 7,802,310 (the ’310 Patent); claims 25-36 and 166 of U.S. Patent No.
9 8,099,420 (the ’420 Patent); claims 10 and 11 of U.S. Patent No. 6,928,442 (the ’442 patent); and
10 claims 46-56 of U.S. Patent No. 7,945,544 (the ’544 patent) (collectively, “claims under review”).

11 7. I began this initial task by reviewing the claims under review, as well as the common
12 specification of the True Name patents, and in connection with these assignments, I had primary
13 communications with Sandeep Seth, a patent litigation attorney retained by PersonalWeb and
14 additionally with Dr. Brian Siritzky, a patent prosecution attorney with a Ph.D. in computer science
15 who had written the True Name patents. Aided by these two individuals, I reviewed and analyzed
16 the prosecution history of the patents and the post-grant proceedings involving them. I also reviewed
17 and analyzed prior constructions issued by various federal district courts and the Patent Trial and
18 Appeal Board in connection with the True Name patents.

19 8. The reexamination and inter-partes review proceedings I particularly focused on in
20 my review included IPR2013-00596, and the Federal Circuit’s decision in *Pers. Web Techs., LLC v.*
21 *Apple, Inc.*, 848 F.3d 987 (Fed. Cir., 2017); IPR2013-00082; IPR2013-00084; IPR2013-00087;
22 Reexam Control No. 90/013,487; Reexam Control No. 90/020,091; Reexam Control No.
23 90/020,102; IRP2014-00058; IPR2014-00066; and IPR2014-00979.

24 9. I reviewed the disclosures and operation of certain prior art references considered in
25 the post-grant proceedings. The prior art references I particularly focused on included U.S. Patent
26 No. 5,649,196 (“Woodhill”), U.S. Patent No. 4,845,715 (“Francisco”), U.S. Patent No. 7,359,881
27 (“Stefik”), U.S. Patent No. 6,135,646 (“Kahn”) and non-patent references including “FWKCS
28 Contents-Signature System Version 1.22” (“Kantor”), “Scalable, Secure, and Highly Available

1 Distributed File Access” (“Satyanarayanan”), and a newsgroup post by Albert Langer (“Langer”). I
2 analyzed True Name patent claims that had been invalidated in these proceedings, the rulings, and
3 their relationship to the claims under review.

4 10. Through my extensive review and analysis of the foregoing, I formed conclusions and
5 opined about the validity of the claims under review. Specifically, I did not find the art I reviewed
6 anticipated these claims or rendered them obvious. I wrote up my opinions and sent them in letter
7 form setting forth my analysis and the basis of my conclusions to PersonalWeb’s counsel on January
8 3, 2018.

9 11. Another one of my assignments for PersonalWeb and its counsel was to analyze
10 whether the True Name patents under review were infringed by certain website operators who
11 PersonalWeb suspected of infringing one or more of the claims under review through two forms of
12 infringement. In the first form of infringement, PersonalWeb suspected website operators were
13 practicing a form of cache-control by sending their webpage files to browsers in HTTP 200 message
14 wherein the website operators were adding an ETag header using a content-based value for the ETag
15 and also adding max-age values in the cache-control header of such messages. The second form of
16 infringement added the use of content-based fingerprints in the filenames of asset files that were
17 listed in the webpage index files sent by the website operator.

18 12. I examined certain optional cache control features of the HTTP 1.1 protocol
19 implemented, for example, the Amazon S3 file storage and service platform in connection with its
20 service of certain webpage files. In particular, I studied which website operators added to an HTTP
21 200 response to a GET request for a webpage file the following two headers: (1) an ETag header
22 with a content based-ETag value; and (2) a cache-control header with a “max-age” directive. I also
23 determined that the website operator, by adding these two headers (neither of which were included in
24 HTTP version 1.0 or required by HTTP version 1.1) to the HTTP 200 message: (a) set an original
25 time period the file’s content was permitted to be cached/used and, after that original time period had
26 expired; and (b) required the recipient to check whether it was still permitted to use that cached
27 content by sending a conditional HTTP GET request with the ETag in an “If-None-Match” header.

28 13. I further determined that the website operator: (a) extended the permitted time for the

Explore Litigation Insights

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

Real-Time Litigation Alerts



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

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

Advanced Docket Research



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

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

Analytics At Your Fingertips



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

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

API

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

LAW FIRMS

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

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

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.