

EXHIBIT F

**CONFIDENTIAL—OUTSIDE COUNSEL ONLY
SUBJECT TO PROTECTIVE ORDER**

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

NETWORK-1 TECHNOLOGIES, INC.

Plaintiff,

- against -

GOOGLE LLC and YOUTUBE, LLC

Defendants.

14 Civ. 2396 (PGG-SN)

14 Civ. 9558 (PGG-SN)

**DEFENDANTS' FIFTH SUPPLEMENTAL RESPONSES AND OBJECTIONS TO
PLAINTIFFS' INTERROGATORY NOS. 7 & 13**

Pursuant to Rules 26(e) and 33 of the Federal Rules of Civil Procedure, Google LLC (“Google”) and YouTube, LLC (“YouTube”) (collectively “Defendants”) by and through their undersigned counsel, hereby further respond and object to Interrogatory Nos. 7 and 13 (the “Interrogatories”) of plaintiff Network-1 Technologies, Inc. (“Network-1” or “Plaintiff”). Defendants expressly reserve the right to amend and/or supplement their responses pursuant to Fed. R. Civ. P. 26(e).

GENERAL RESPONSES & OBJECTIONS

Defendants incorporate by reference all general and specific responses and objections previously made in Defendants’ original Responses and Objections to Plaintiff’s First, Second, Third, and Fourth Sets of Interrogatories.

SPECIFIC RESPONSES & OBJECTIONS

Each of the General Responses and Objections are incorporated by reference into each and every specific response set forth below. Notwithstanding the specific response to any Interrogatory, Defendants do not waive any of their General Responses or Objections. Subject to

**CONFIDENTIAL—OUTSIDE COUNSEL ONLY
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the General Responses and Objections, and without waiver, modification or limitation thereof, Defendants' supplemental responses and objections to the Interrogatories are set forth below.

INTERROGATORY NO. 7:

For each Accused Instrumentality, identify each and every basis for your claim that you have not infringed and do not infringe the claims of the Asserted Patents, including an identification of the claim elements that you contend that you do not practice, identification of all facts and documents that support or contradict your claim, and identification of all persons with knowledge of the same.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 7:

Defendants incorporate by reference each of their general objections above. Subject to the foregoing, Defendants supplement their prior responses to this Interrogatory as follows:

Defendants further respond that the Accused Instrumentalities do not infringe the asserted claims of any of the Patents-in-Suit because not all claimed steps take place within the United States. Specifically, any “non-exhaustive search identifying a neighbor” ('988 patent), “sublinear approximate nearest neighbor search of reference extracted features of reference identified media works” ('237 patent), or “non-exhaustive, near neighbor search” to “correlate” media works and identifiers ('464 patent), to the extent such searches are performed at all by the Accused Instrumentalities, are conducted outside the United States.

INTERROGATORY NO. 13:

To the extent that you contend that there exist commercially acceptable and available non-infringing alternatives to the Accused Instrumentalities with respect to the patents-in-suit, identify with particularity such non-infringing alternatives, the dates on which such alternatives were available, the cost of implementation for each, and the effect of implementation for each, including any studies, tests or analyses of these costs and effects.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 13:

Defendants incorporate by reference each of their general objections above. Subject to the foregoing, Defendants supplement their prior responses to this Interrogatory as follows:

**CONFIDENTIAL—OUTSIDE COUNSEL ONLY
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Defendants further respond that as described in Defendants' third supplemental response to Interrogatory No. 13, one available non-infringing alternative is geographically locating the servers running the Accused Instrumentalities, or a portion of the Accused Instrumentalities, outside of the United States. Defendants reiterate their contention that the Accused Instrumentalities do not infringe any of the claims of the patents-in-suit. By providing further detail regarding this non-infringing alternative, Defendants do not concede that the Accused Instrumentalities are distinct from or equivalent to any particular alternative.

As explained in the prior testimony of Defendants' fact and expert witnesses, no version of the Content ID system infringes any patents owned by Network-1. Defendants' witnesses further explained that, nonetheless, it would be relatively inexpensive and easy to relocate the accused Content ID Match System outside of the United States. Defendants have recently acquired additional evidence consistent with this testimony. Specifically, Defendants have relocated the production instances of the Content ID Match System portion of the Accused Instrumentalities that had previously been located within the United States to servers exclusively outside of the United States, primarily in Europe. This non-infringing alternative has been available since at least September 2011, when Defendants had already set up at least one instance of the Content ID Match System in Europe.

For at least the time period between September 2011 and November 2020, production instances of the Content ID Match System were located in both the United States and in Europe. Beginning in November 2020, Defendants began relocating the U.S. instances of the Match System to servers outside the United States. The relocation was complete by no later than January 28, 2021, confirming the prior testimony of Defendants' witnesses, who explained that such a relocation would be relatively simple as a technical matter, would not take long, would be

**CONFIDENTIAL—OUTSIDE COUNSEL ONLY
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relatively inexpensive, and would have no adverse effect on the functioning of the Content ID Match System, thus demonstrating the limited value of the Patents-in-Suit, even if they were valid and infringed (and they are not).

Defendants relocated to outside the United States all instances of the Partner Reference index, the UGC index, and indices used to detect abusive and child safety content utilized by the Match System that had been inside the United States. Accordingly, at the current time, for all content uploaded by users of YouTube that is analyzed by Content ID, embeddings are sent to Match System servers in Europe, which determine whether a given uploaded video reuses content owned by a YouTube Partner. Any resulting “match” is then sent on to the claiming system, which is located on other servers.

Defendants utilized current salaried employees and did not hire any additional personnel or pay overtime for the project. YouTube Resource Management personnel spent 18 hours assessing and locating server capacity in data centers outside the United States and analyzing the relocation. Engineers on the Content ID team spent 192 hours analyzing, coordinating, and executing the relocation. These individuals performed these tasks within the scope of their job responsibilities and as part of their normal workload.

In terms of machine costs, Defendants utilized existing machine capacity and did not purchase any additional hardware to implement the relocation. The engineer team executing the relocation accounted for incremental machine costs that were allocated to YouTube due to increased capacity utilization while each particular machine database at issue was being moved, due to the need to hold capacity in multiple locations while data was being transferred. After the relocation of a particular machine database was complete, the capacity that had previously been used to host that machine database in the United States was released for utilization by others

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