HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Norfolk Division

SECURITY FIRST INNOVATIONS, LLC, Plaintiff, v. GOOGLE LLC, Defendant.	Civil Action No. 2:23-cv-00097 (JKW-RJK)

GOOGLE LLC'S PROPOSED CLAIM TERMS FOR CONSTRUCTION

Pursuant to the Scheduling Order governing this action (Dkt. 54), Google LLC ("Google") hereby provides the below list of proposed constructions and accompanying intrinsic and extrinsic evidence for the claim terms phrases, and/or clauses identified and conferred upon by the parties. The claim terms, phrases, and/or clauses are listed in no particular order, and the order in which they are identified should not be taken as an indication of relative importance. Google reserves the right to modify, supplement, or amend the list of claim terms, phrases, and/or clauses, the constructions, and the intrinsic and extrinsic evidence set forth below.

Google has not yet completed discovery and its investigation is still ongoing. Accordingly, Google provides this list based on its current knowledge and reserves the right to amend, modify, or supplement this list as necessary based on further discovery and understanding of SFI's positions. SFI's response to Interrogatory No. 7 is vague and deficient. SFI's response to Interrogatory No. 7 does not adequately disclose SFI's infringement theories and claim interpretations. Google reserves the right to amend or supplement its identification of proposed terms and claim elements for construction, its proposed constructions, and the intrinsic and

Google Exhibit 1041
Google v. SFI

extrinsic evidence in the event it obtains or discerns additional information through further investigation, discovery, or disclosure from SFI or from third parties. In the event SFI later attempts to amend or supplement its response to Interrogatory No. 7, Google reserves the right to propose additional claim terms and elements for construction, and to modify its proposed constructions and intrinsic and extrinsic evidence. Google further anticipates that this list may be modified after considering SFI's list of proposed construction and intrinsic and extrinsic evidence and participating in conferences with SFI regarding the same.

Google reserves the right to modify, supplement, or amend the list of claim terms, phrases, and/or clauses set forth below. Google also reserves the right to cite additional extrinsic evidence, including dictionary definitions, citations to learned treatises and prior art, and testimony of percipient and expert witnesses, to rebut the proposed constructions of the Plaintiff.

Google also reserves the right to put forth the expert testimony of Dr. Sandeep Chatterjee in response to any expert testimony Plaintiff may offer in support of its proposed constructions.

Subject to the foregoing, Google identifies the following proposed constructions and intrinsic and extrinsic evidence for the parties' previous identified terms:

Claim Term	Proposed Construction	Evidence
generating a plurality of data chunks based on the data set, '609, claim 1) distributing the data set into a plurality of data chunks ('116, claim 1, 9)	splitting the data set into a plurality of data chunks ('609, claim 1) splitting the data set into a plurality of data chunks ('116, claim 1, 9)	'140 patent[1] at Abstract, 3:20-30, 6:41-45, 8:15-22, 8:39-41, 18:15-31, 21:13-40, 52:55-53:5, 53:40-55:47, 67:34-68:11, 71:42-45, Figs 6, 37, 38, 39, 46. '854 patent at 77:43-57. The citations above are exemplary, as the specifications repeatedly and consistently describe the splitting of shares/chunks,

[1] As there is considerable overlap among the specifications of the asserted patents, citations to a given patent also encompass the same language in other patents.

distributing the data set into a plurality of shares ('854, claim 1) distributing the data set into shares ('140, claim 1)	splitting the data set into a plurality of shares ('854, claim 1) splitting the data set into shares ('140, claim 1)	and Google reserves the right to refer to other such instances in its briefing. *See also* '140 patent, *passim*; '854 patent, *passim*. Complaint, ¶¶ 15, 22. ORSINI_000003402: [redacted] ORSINI_000003412: [redacted] ORSINI_000003457: [redacted]

		MUMAUGH 000000300: [redacted] MUMAUGH 000000328: [redacted] MUMAUGH 000000349: [redacted]

		[redacted] MUMAUGH_000000542: [redacted]
data indicative of … key(s) (‘140 Claim 1; ‘854, claim 1; ‘609, claims 1, 2, 3)	metadata about … key(s); not an encryption key	‘104 patent at 85:18-32, 90:35-91:22. ‘140 FH, Amendment dated December 7, 2015 at 6-7. *The American Heritage College Dictionary* (4th ed. 2002): **indicate**: “1. To show the way to or the direction of; point out. 2. To serve as a sign, symptom, or token of; signify”

		Webster's 3rd New Int'l Dictionary (2002): **indicate**: "to point out or point to or toward with more or less exactness : show or make known with a fair degree of certainty: as a (1) : to show the probable presence or existence or nature or course of; give fair evidence of : be a fairly certain sign or symptom of : reveal in a fairly clear way <their laughter indicated their happiness) <his reply indicated total disagreement) <indicated his impatience by shrugging> <an anecdote that-~s the kind of people they were> <a fever that ~s severe illness>" *Merriam-Webster's Collegiate Dictionary* (11th ed. 2004): **indicate**: 1 a : to point out or point to b : to be a sign, symptom, or index of <the high fever ~s a serious condition> C : to demonstrate or suggest the necessity or advisability of (indicated the need for a new school> <the indicated treatment>" MUMAUGH_000003599: [redacted] ORSINI_000003375 – ORSINI_000003376: [redacted]

		[redacted]
separately storing each data chunk of the plurality of data chunks together with one of the plurality of obfuscated different encryption key ('116, claim 1)	Separately storing each data chunk of the plurality of data chunks with a key other than the key that encrypts that chunk on a plurality of different storage devices	'140 patent at 14:44-59, 53:19-39, 54:45-50, 56:37-40, Figs. 21-24. '116 FH, Reply dated October 18, 2019 at 9. *The American Heritage College Dictionary* (4th ed. 2002): **obfuscate**: "To make so confused or opaque as to be difficult to perceive or understand."

		Webster's 3rd New Int'l Dictionary (2002): **obfuscate**: "**1**: CONFUSE, BECLOUD; esp : to cause confusion in the mind of <to give the reader all the facts and yet ~ him as to meaning> **2**: to make obscure: **a**: to make difficult of comprehension or interpretation <the small facts could not be ignored without obfuscating the main dramatic purpose> **b**: to make unnecessarily complex usu. to the point of confusion <his use of symbolism became a mere mechanical device for obfuscating the commonplace and intelligible>" *Merriam-Webster's Collegiate Dictionary* (11th ed. 2004): **obfuscate**: "1 a : DARKEN b : to make obscure <~the issue> 2: CONFUSE <~ the reader>"
transforming ('116, claim 9) performing a transform ('116, claim 2)	Changing without the use of a secret key the bits of a key / data indicative of a key	'116 patent, 1:42-44. '140 patent, 14:44-59, 75:34-56, 81:4-17, 85:19-53, 87:3-35. Ronald L. Rivest, "All-Or-Nothing Encryption and The Package Transform" (1997) at 3. *The American Heritage College Dictionary* (4th ed. 2002): **transform**: "1. To change markedly the appearance or form of. 2. To change the nature, function, or condition of; convert." *Webster's 3rd New Int'l Dictionary* (2002): **transform**: "1 a : to change completely or essentially in composition or structure : METAMORPHOSE -- usu. used with into or to <the sea king's daughter is ~ed into a river -- Alfred Frankenstein> <life-giving water which ~s the dusty sagebrush lands into fertile fields —Amer. Guide Series: Texas> <the process which ~ed the lumber ... into gunstocks —

		C.W.Mitman> <the processes by which policy is ~ed into law and administration -- A.N.Holcombe> b : to change the outward form or appearance of : ALTER <for a moment the smile ~ed his face -- J.C. Smith b. 1924> <the drizzle that had so greatly ~ed the scene -- Thomas Hardy> <science ... has ~ed the world as the scene of the human drama -- C.W.Eliot> -- often used with into or to <an elaborate experiment in camouflage meant to ~ it into... farms and orange groves —J.G.Cozzens> <the setting sun suddenly ~ed the ... peaks to furnace red -- George Farwell> c : to change in character or condition : CONVERT, TRANSFIGURE <do not be conformed to this world but be ~ed by the renewal of your mind --Rom 12:2 (RSV)> <a change in the economic condition is not alone sufficient to ~ woman's situation —-Nation> — often used with to <inventions and discoveries which quickly ~ the people ... from barbarism to civilization —-R.W.Murray> *Merriam-Webster's Collegiate Dictionary* (11th ed. 2004): **transform**: **a** : to change in composition or structure **b**: to change the outward form or appearance of **c** : to change in character or condition : CONVERT"
Dataset/data set (*passim*)	collection of related information made up of separate elements that can be treated as a unit in data handling	'140 patent at 53:3-5, 61:57-63:12, 62:45-67, 63:13-15, 87:48-49. *Microsoft Computer Dictionary* (4th ed. 1999): **data set**: "A collection of related information made up of separate elements that can be treated as a unit in data handling." *The American Heritage College Dictionary* (4th ed. 2002): **data set:** "a collection of related data records on a computer-readable medium, such as a disk"

		Newton's Telecom Dictionary (16th ed. 2000): **data set**: "In AT&T jargon, a data set is a modem, i.e. a device which performs the modulation/demodulation and control functions necessary to provide compatibility between business machines which work in digital (on-off) signals and voice telephone lines. In IBM jargon however, a data set is a collection of data, usually in a file on a disk."
virtual disk, the virtual disk comprising a directory mapped to the plurality of physical storage devices ('140 Claim 1)	a distributed file system shared among file servers that includes a directory with a clients' view of all file assets mapped to the physical storage devices on which they are stored	'140 patent, at 66:46-62, 87:16-88:56. '140 FH, Feb. 19, 2013 Office Action at 8-10, 15-17. '140 FH, Jul. 7, 2015 Office Action at 5-6. '140 FH, Dec. 7, 2015 Amendment at 6-7. *Microsoft Computer Dictionary* (4th ed. 1999): **virtual disk**: "*See* RAM disk" *Microsoft Computer Dictionary* (4th ed. 1999): **RAM disk**: "Short for **r**andom **a**ccess **m**emory **disk.** A simulated disk drive whose data is actually stored in RAM memory. A special program allows the operating system to read from and write to the simulated device as if it were a disk drive. RAM disks are extremely fast, but they require that system memory be given up for their use. Also, RAM disks usually use volatile memory, so the data stored on them disappears when power is turned off. Many portables offer RAM disks that use battery-backed CMOS RAM to avoid this problem. *See also* CMOS RAM. *Compare* disk cache." *Newton's Telecom Dictionary* (16th ed. 2000): **Virtual Disk**: "A portion of RAM (Random Access Memory) assigned to

		simulate a disk drive. Also called a ram disk. See RAM DISK." *Newton's Telecom Dictionary* (16th ed. 2000): **RAM Disk**: "A logical device made from semiconductor (i.e. chip) memory which emulates the functioning of a disk drive as closely as possible. Since most semiconductor memory (RAM) is volatile, most RAM disks are also volatile, i.e. they lose their memory when you turn off power"
external key ('854, claim 1, 609, claim 9)	"a key generated by a third party" OR indefinite	'104 patent at 10:61-11:2, 24:27-34, 31:8-30, 31:31-42, 32:30-59, 56:4-18, 57:66-58:32, 64:60-65:15, 71:1-30, 74:17-34, 80:57-81:3, 81:53-65, Fig. 1 '854 patent at 77:59-78:8, 78:66-79:23: MUMAUGH_000000273: [redacted] MUMAUGH_000000344: [redacted] MUMAUGH_000000350: [redacted]

		[redacted] TOPSPIN_000000166: [redacted]
external storage system (‘854, claim 1)	“a storage system controlled by a third party” or indefinite	‘104 patent at 10:61-11:2, 24:27-34, 31:8-30, 31:31-42, 32:30-59, 56:4-18, 57:66-58:32, 64:60-65:15, 71:1-30, 74:17-34, 80:57-81:3, 81:53-65, Fig. 1 ‘854 patent at 77:59-78:8, 78:66-79:23: MUMAUGH_000000273: [redacted] MUMAUGH_000000344: “[redacted] MUMAUGH_000000350: [redacted]

		[redacted] TOPSPIN_000000166: [redacted]
minimum number of the plurality of [data] chunks (‘854, claim 1; ‘609, claim 1)	“a predefined number of the lowest amount of the plurality of data chunks”	‘140 patent at 3:20-30, 20:40-21, 21:41-63, 66:46-62, 69:9-23, 73:23-36, 76:62-77:4, 79:40-46, 81:18-34. ‘854 patent at 78:11-62.
session key (‘140 Claims 1, 8)	“Key generated each time data is secured”	’140 Patent at 32:36-52, 56:19-41, 56:53-57:13, 57:25-54, 57:66-58:33, 61:27-56, 76:4-18, Figs. 21-24. ‘854 patent at 57:11-59:24, 79:8-14. ’140 FH, Dec. 7, 2015 Remarks at 6-7. *Microsoft Computer Dictionary* (4th ed. 1999): **session**: “1. The time during which a program is running. In most interactive programs, a session is the time during

		which the program accepts input and processes information. 2. In communications, the time during which two computers maintain a connection." *Newton's Telecom Dictionary* (16th ed. 2000): **Session**: "An active communications connection,, measured from beginning to end, between computers or applications over a network. Often used in reference to terminal-to-mainframe connections. Also a data conversation between two devices, say, a dumb terminal and a mainframe. It is possible to have more than one session going between two devices simultaneously." MUMAUGH_000000344: [redacted] MUMAUGH_000000381: [redacted] ORSINI_000003423: [redacted]
"processor" / "the processor" ('609 claim 1, 2, 3)	A processor is the same processor as the processor	

a/the plurality of [different] [distinct] encryption keys (‘116, claim 1, 9, 11, ‘854 claim 1, 2)	a/the plurality of different[distinct] encryption keys are the same keys	
the plurality of obfuscated different encryption keys (‘116, claim 1, 5,)	The plurality of different encryption keys obfuscated in step 1[c]	
the plurality of transformed different encryption keys (‘116, claim 9)	The plurality of encryption keys transformed in step 9[c]	
data set/the data set (‘854 claim 1, ‘609 claim 1, ‘116 claim 1, 9, ‘140 patent, claim 1, 2, 4, 7, 8	A data set and the data set are the same data set	
an external key/the external key (‘854 claim 1)	An external key is the same key as the external key	
a plurality of data chunks/the plurality of data chunks/the chunks (‘854 claim 1, 2; 609 claim 1, 2, 3; ‘116 1, 2, 5, 9, 11)	A plurality of data chunks, the plurality of data chunks, and the chunks are all the same set of chunks	
a plurality of data shares/the plurality of shares/the shares (‘140 claim 1, 2, 7, ‘854 claim 1)	A plurality of data shares, the plurality of shares and the shares are all the same set of shares	
the respective second keys/the distinct encryption keys (‘609 claim 1,	the respective second keys and the distinct encryption keys are the same keys	

a first key/the first key(‘609 claim 1)	A first key and the first key are the same key	
at least one session key/the at least one session key(‘140 claim 1, 8)	at least one session key and the at least one session key are the same key	
virtual disk/the virtual disk (‘140 claim 1)	virtual disk and the virtual disk are the same	
a plurality of data storage devices/the plurality of data storage devices (‘140 claim 1)	a plurality of data storage devices and the plurality of data storage devices are the same set of storage devices	
a secure storage system/the secure storage system (‘140 claim 1, 2, 4, 5, 7, 8)	a secure storage system and the secure storage system are the same system	
a secure storage network/the secure storage network (‘140 claim 1, 2, 4, 5, 7, 8)	a secure storage network and the secure storage network are the same network	
Order of Steps, 854 patent, claim 1	Steps must be performed in order	
Order of Steps, 609 patent, claim 1	Steps must be performed in order	

Pursuant to the Scheduling Order, Google is prepared to meet and confer with SFI at a mutually agreeable time in an effort to minimize disputes and to facilitate the preparation of the Joint Claim Construction Chart and Prehearing Statement.

Dated: November 10, 2023

/s/ David Perlson

Stephen E. Noona (VSB No. 25367)
KAUFMAN & CANOLES, P.C.
150 W. Main Street, Suite 2100
Norfolk, VA 23510-1665
Telephone: (757) 624-3239
Facsimile: (888) 360-9092
senoona@kaufcan.com

David A. Nelson (*pro hac vice*)
Nicholas D. Caspers (*pro hac vice*)
QUINN EMANUEL URQUHART & SULLIVAN, LLP
191 N. Wacker Drive, Suite 2700
Chicago, IL 60606
Telephone: (312) 705-7400
Facsimile: (312) 705-7401
davenelson@quinnemanuel.com
nicholascaspers@quinnemanuel.com

David Perlson (*pro hac vice*)
Mike Trombetta (*pro hac vice*)
QUINN EMANUEL URQUHART & SULLIVAN, LLP
50 California Street, 22nd Floor
San Francisco, CA 94111
Telephone: (415) 875-6600
Facsimile: (415) 875-6700
davidperlson@quinnemanuel.com
miketrombetta@quinnemanuel.com

Deepa Acharya (*pro hac vice*)
Kevin Hardy (*pro hac vice*)
QUINN EMANUEL URQUHART & SULLIVAN, LLP
1300 E Street NW, Suite 900
Washington, DC 20001
Telephone: (202) 538-8107
Facsimile: (202) 538-8100
deepaacharya@quinnemanuel.com
kevinhardy@quinnemanuel.com

Hannah E. Dawson (*pro hac vice*)

QUINN EMANUEL URQUHART &
SULLIVAN, LLP
111 Huntington Avenue, Suite 520
Boston, MA 02199
Telephone: (617) 712-7100
Facsimile: (617) 712-7200
hannahdawson@quinnemanuel.com

Counsel for Google LLC

CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure, I hereby certify that, on November 10, 2023, all counsel of record who have appeared in this case are being served with a copy of the foregoing via email.

Dated: November 10, 2023

/s/ Antonio Sistos
Antonio Sistos