

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

1	Supplementary Search Report of EP 15783292 dated 07 November 2017
2	Seugwon Shin et al, "Fresco: Modular Composable Security Services for Software-Defined Networks", NDSS Symposium 2013, 23 April 2013, pages 1-16 XP055422187

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/JEAN F VOLTAIRE/	Date Considered	08/14/2018
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2017-11-19
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:04
S7	3	"20130329734"	US-PGPUB;	OR	OFF	2018/08/14

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			20:05
S8	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:12

		"20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637" "20160113006" "8358580" "9602265" "8520603" "20180077229" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677" "20120236750" "9240906" "8576722" "9621361" "20080049745" "20080049747" "9473985" "20170201979" "20120127882" "20170142165" "8787303" "9042370" "8619596" "20120201139" "20080002676" "7808918" "20150312283" "9231820" "20130322432" "8307065" "20080002716" "9054986" "20140043977" "8619820" "9241277" "20120330804" "20160249248" "20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/14 20:13

		"9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"	IBM_TDB			
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2018/08/14 20:14

		"20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "2013032265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	EPO; JPO; DERWENT; IBM_TDB			
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/08/14 20:18

			DERWENT; IBM_TDB			
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/14 20:21

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:22
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1	US-PGPUB;	OR	OFF	2018/08/24

		stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:26
S40	91	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:27
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/27 07:46

			IBM_TDB			
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S49	39979	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:49

9/ 3/ 2018 8:59:44 PM

C:\Users\jvoltage\Documents\EAST\Workspaces\15126288.wsp



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 9263

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
15/126,288	09/15/2016 RULE	370	2466	ORCKIT-001-US		
APPLICANTS ORCKIT IP, LLC., Newton, MA; INVENTORS Yossi BARSHESHET, Ashdod, ISRAEL; Simhon DOCTORI, Gan-Yavne, ISRAEL; Ronen SOLOMON, Ranat-Gan, ISRAEL; ** CONTINUING DATA ***** This application is a 371 of PCT/US2015/026869 04/21/2015 which claims benefit of 61/982,358 04/22/2014 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 12/27/2016						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/JEAN F VOLTAIRE/</u> Examiner's Signature		☐ Met after Allowance Initials	STATE OR COUNTRY ISRAEL	SHEETS DRAWINGS 6	TOTAL CLAIMS 31	INDEPENDENT CLAIMS 1
ADDRESS May Patents Ltd. c/o Dorit Shem-Tov P.O.B 7230 Ramat-Gan, 5217102 ISRAEL						
TITLE A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS						
FILING FEE RECEIVED 1180	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

Doc code: IDS

PTO/SB/08a (03-15)

Doc description: Information Disclosure Statement (IDS) Filed

Approved for use through 07/31/2016. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	
	Examiner Name	
	Attorney Docket Number	ORCKIT-001-US

U.S. PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
U.S. PATENT APPLICATION PUBLICATIONS							Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	20100208590	A1	2010-08-19	ALCATEL LUCENT			
	2	20110264802	A1	2011-10-27	ALCATEL LUCENT			
	3	20100212006	A1	2010-08-19	ALCATEL LUCENT			
If you wish to add additional U.S. Published Application citation information please click the Add button.							Add	
FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2672668	EP	A1	2013-12-11	JUNIPER NETWORKS INC		

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	BARSHESHET, Yossi
Art Unit	
Examiner Name	
Attorney Docket Number	ORCKIT-001-US

If you wish to add additional Foreign Patent Document citation information please click the Add button			Add
NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	International Search Report of PCT/US2015/026869 dated 06 August 2015	

If you wish to add additional non-patent literature document citation information please click the Add button			Add
EXAMINER SIGNATURE			
Examiner Signature	/JEAN F VOLTAIRE/	Date Considered	08/14/2018

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	BARSHESHET, Yossi
Art Unit	
Examiner Name	
Attorney Docket Number	ORCKIT-001-US

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2016-09-15
Name/Print	Yehuda Binder	Registration Number	73612

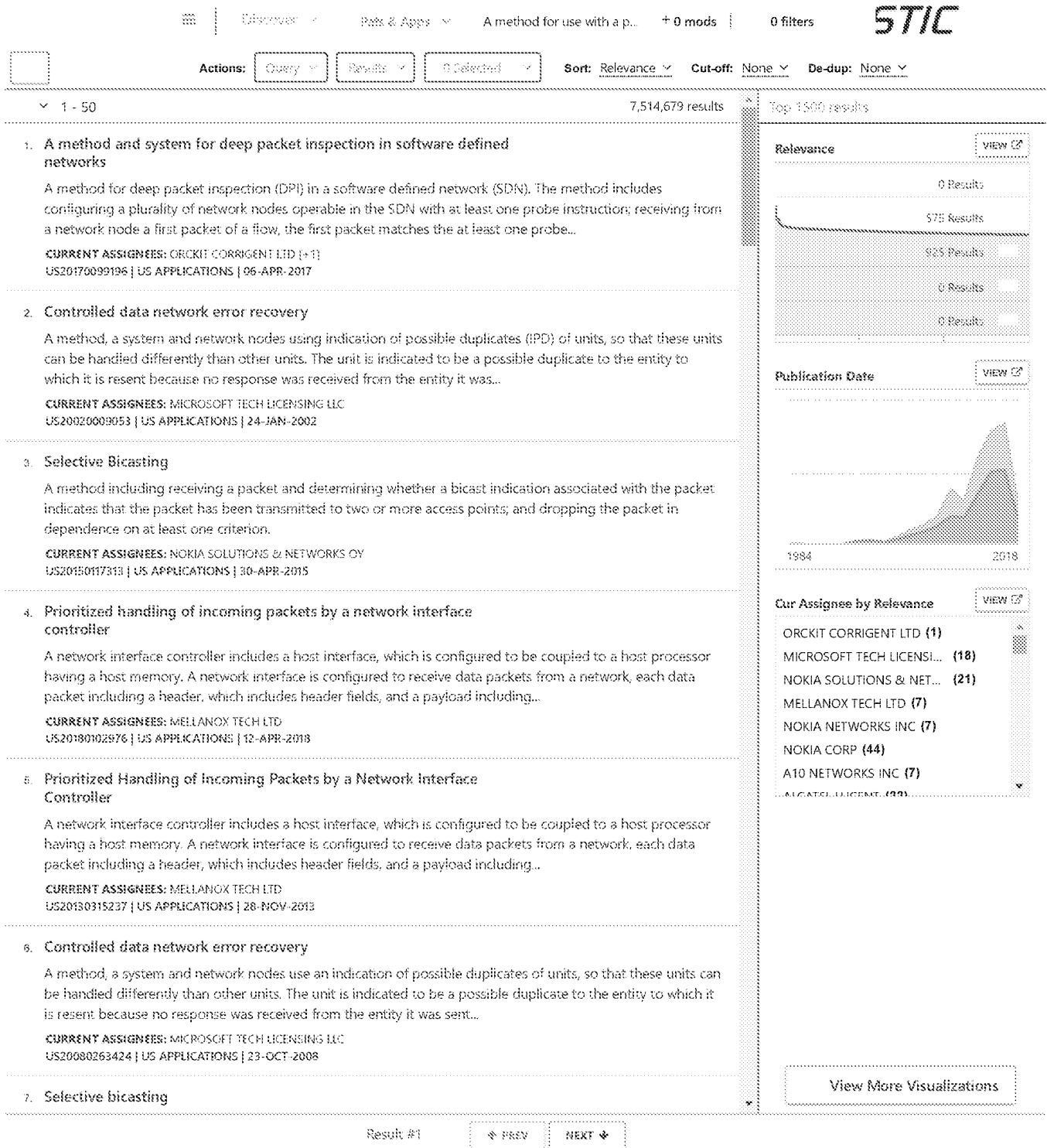
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



Electronic Acknowledgement Receipt	
EFS ID:	34528122
Application Number:	15126288
International Application Number:	
Confirmation Number:	9263
Title of Invention:	A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS
First Named Inventor/Applicant Name:	Yossi BARSHESET
Customer Number:	131926
Filer:	Yehuda Binder/Dorit Binder
Filer Authorized By:	Yehuda Binder
Attorney Docket Number:	ORCKIT-001-US
Receipt Date:	10-DEC-2018
Filing Date:	15-SEP-2016
Time Stamp:	04:21:03
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	9-2018-NFOA-Response.pdf	54113	no	9
			77b7f68cae35f4d195766e2bfb8839ccf6ca444f		

Warnings:

Information:	
Total Files Size (in bytes):	54113
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: ORCKIT-001-US

In re Application of:	)	Confirmation No. 9263
	)	
Ronen Solomon	)	Art Unit: 2466
	)	
Appln. No.: 15/126,288	)	Examiner: Voltaire, Jean F.
	)	
Filed: September 15, 2016	)	Washington, D.C.
	)	
For: A METHOD AND SYSTEM FOR		
DEEP PACKET INSPECTION ...	)	December 9, 2018
	)	

AMENDMENT

Customer Service Window, Mail Stop Amendment
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, 401 Dulany Street
Alexandria, Virginia 22314

Sir:

This is in response to the examiner's action of
September 12, 2018 ("Action").

Remarks / Arguments begin on page 2 of this paper.

REMARKS / ARGUMENTS

The Examiner's Action dated September 12, 2018, has been received, and its content carefully noted.

Office action, Section 12, pages 4-22

Claims 20-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolganow *et al.* (US 2010/0208590 - "Dolganow") in view of Nguyen *et al.* (US 2014/0052836 - "Nguyen").

Combining Dolganow and Nguyen.

a. The Action contends that the Dolganow and Nguyen are combined being in a 'similar field of endeavor'. The applicant respectfully request a clear definition of the 'field of endeavor' as required by the rules. (MPEP 2141.01(a)(I) - *'The examiner must determine what is "analogous prior art" for the purpose of analyzing the obviousness of the subject matter at issue'*).

b. Applicant submits that the Dolganow and Nguyen references are directed towards respectively different purposes and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Dolganow reference involves DPI, where packets are handled based on their content, while the Nguyen reference involves SDN, where packets are handled based on externally received instructions. For example, the Dolganow reference involves **OSI Layer 3** or above analysis, while the Nguyen reference involves local routing (**OSI Layer 2**) without any analysis of the packet content.

Further, while the Dolganow reference is directed to **network traffic handling or routing devices**, such as routers

or switches (Figure 1 and paragraphs 25 and 27), the Nguyen reference is directed to HIS which is an **end devices**, intended to generate of received information, such as 'personal computer, a PDA, a consumer electronic device, a display device' as described in Figure 1 and paragraph 0015.

Hence, the two references are directed to different devices having different functionalities and differently handling traffic, and thus cannot be combined. It is respectfully submitted that it is simply not appropriate to select a secondary reference that happens to disclose, in isolation, a single feature, and conclude, without a proper basis, that it would be obvious to add that feature to another device in a different field.

c. It is further noted that MPEP §808.02(A) explicitly recites that **different classes** "... shows that each invention has attained recognition in the art as a **separate subject** for inventive effort, and also a **separate field** of search." (Emphasis added). Furthermore, there is no suggestion or motivation to combine:

*[W]hen art is directed to a **different purpose** then a **claimed invention**, an inventor would have less motivation or occasion to consider it.*

In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992).

The Dolganow reference is classified under U.S. Class 370/235 associated with "MULTIPLEX COMMUNICATIONS - DATA FLOW CONGESTION PREVENTION OR CONTROL", mainly focusing on regulating the amount of information transmitted through the network, while the Nguyen reference is classified under U.S. Class 709/223 associated with "ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING" - relating mainly to the managing

the resources of the computers connected by a computer network. Thus, the two reference are in different fields.

d. Further, it would not be appropriate to base this rejection on a combination of these references because the devices and networks described in the Dolganow and Nguyen references are each self-contained and independently operate effectively.

Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.

[*Kinetic Concepts v. Smith and Nephew*, 688 F.3d 1342, at 1369 (CAFC, 2012).] - See MPEP §2143.01.

e. The Action fails to explain HOW the device described in the Dolganow reference is being modified to include the limitations taught by the Nguyen reference. The Action only states that the missing limitations are disclosed by the Nguyen reference and as such may be combined. A clear explanation is required according to the rules.

Rationale for Combining Dolganow and Nguyen.

a. The rationale for combining is stated on page 6 as "... to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality". Assuming *arguendo* that such combination is properly made in accordance with prevailing U.S. patent law, it is respectfully submitted that SDN functionality is a technical functionality *per se*, and the Action fails to explain WHY such feature is required or is beneficial, and as such the rationale fails to explain why one of ordinary skill in the art at the time the invention was made would see any

reason to combine the references in an attempt to arrive at the claimed invention. It is noted that *"Absent some articulated rationale for doing so, the Examiner's conclusory assertion is inadequate to support a conclusion of obviousness."* See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); see also *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967) (*"The legal conclusion of obviousness must be supported by facts. Where the legal conclusion is not supported by facts it cannot stand."*). Further, even if the SDN is kind of advantage, none of the cited prior art references suggested that the primary reference could benefit from that advantage or was in need of that advantage. [See, e.g., *Ex parte Saiki*, No. 2000-0373, 2002 WL 32102452, at *3 (B.P.A.I. Jan. 17, 2002); *Ex parte Burak*, No. 2004-0823, 2004 WL 4981768, at *4 (Dec. 8, 2004)].

b. It is trivial, inherent, and self-evident that always adding a feature A to any device results in a device having a capability of feature A. Similarly, it is trivial, inherent, and self-evident that always adding the functionality of SDN to ANY system results in *"a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality"*. Hence, the rationale provides no link to the specific present application, as required in MPEP 2143 that clearly states that *"Any rationale employed must provide **a link between the factual findings and the legal conclusion of obviousness.**"* (Emphasis added), and *"... there must be "some articulated reasoning with some rational underpinning" to support the Examiner's findings and conclusion of obviousness"*. See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 401, 418 (2007).

c. The Dolganow reference focuses on DPI of received packets, and acting upon the DPI analysis. However, the Dolganow reference is silent regarding any receiving any instruction of how to deal with received packet as known in SDN, and is in particular silent regarding routing any packet based on any received instruction or criteria. Adding such SDN functionalities inherently changes the scheme from DPI scheme, thus such modifications would change the principle of operation of the system described in the Dolganow reference, see 2143.01:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.

In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

d. In particular, such modification of the router or switch described in the Dolganow reference requires massive change of the device, to include means for receiving instruction via an additional port, storing these instructions and criteria, applying dedicated SDN software (such as OpenFlow) requiring massive hardware, processing power and software, and forwarding packets based on this criteria. Such modifications fundamentally and inherently change the conventional routing / switching functionalities described in the Dolganow reference, and would require a substantial reconstruction and redesign of the elements shown in the Dolganow reference as well as a change in the basic principles under which the Dolganow reference construction was designed to operate. (In re Ratti, 270 F.2d 810, 813 (CCPA 1959)): *"a change in the basic principles" refers to change that is fundamental in scope so as to relate to scientific or technical principles under which*

the invention is designed to operate.". Further, such changes would render the Dolganow reference inoperable for its intended purpose since it could only operate in an SDN supported network.

Regarding claim 1.

a. Claim 1 explicitly recites the limitation of: *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*. This limitation is not addressed by the Action. A prima facie case for obviousness *"requires a suggestion of all limitations in a claim,"* CFMT, Inc. v. Yieldup Int'l Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003). It is noted that the Dolganow reference fails to disclose any controller in general or any *"an instruction and a packet-applicable criterion"*, and in particular fails to disclose the recited *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*.

b. Claim 1 explicitly recites the limitation of: *"... receiving, by the network node from the controller, the instruction and the criterion"*. The Action relies upon paragraphs 12, 30, and 81 of the Dolganow reference. HOWEVER, the Dolganow reference in general, and the cited paragraphs in particular, ONLY described receiving packets as part of the regular traffic to be analyzed, and are silent regarding any receiving from a controller in general, and receiving of *'the instruction and the criterion'* in particular.

Regarding claims 21-26, 28-30, 36, 44, 49-56, 59, 67, 72-73.

While these claims clearly define different features and functionalities, the Action improperly use the SAME rationale for combining with the Nguyen reference. First, the stated rationale is defective as described above. Second, using the SAME rationale clearly violates the fact that the Office must *"make the necessary findings and have an adequate 'evidentiary basis for its findings."* [Quoting In re Nuvasive (Fed. Cir. 2016), internally quoting In re Lee (Fed. Cir. 2002)], and that the Office *"must examine the relevant data and articulate a satisfactory explanation for its actions including a rational connection between the facts found and the choice made."* Id. (Emphasis added). Further, In Broadcom Corp. v. Emulex Corp., 732 F.3d 1325, 1335 (Fed. Cir. 2013), the Court held that *"[a]n invention is not obvious just 'because all of the elements that comprise the invention were known in the prior art;' rather, a finding of obviousness at the time of the invention requires a 'plausible rational [sic] as to why the prior art references would have worked together."* It is noted that *"Absent some articulated rationale for doing so, the Examiner's conclusory assertion is inadequate to support a conclusion of obviousness."* See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007); see also In re Warner, 379 F.2d 1011, 1017 (CCPA 1967) (*"The legal conclusion of obviousness must be supported by facts. Where the legal conclusion is not supported by facts it cannot stand."*).

The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
Registration No. 73,612

Tel: +972-9-7409241
Mobile: +972-54-4444577
e-mail: yehuda@maypatents.com



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	Yossi BARSHESHET	ORCKIT-001-US	9263
131926	7590	04/15/2019	EXAMINER	
May Patents Ltd. c/o Dorit Shem-Tov			VOLTAIRE, JEAN F	
P.O.B 7230				
Ramat-Gan, 5217102				
ISRAEL			ART UNIT	PAPER NUMBER
			2466	
			MAIL DATE	DELIVERY MODE
			04/15/2019	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Response to amendment

2. This is a Final Office action in response to applicant's remarks/arguments filed on 12/10/2018.

3. Status of the claims:

- Claims 20-73 have not been amended.
- Claims 20-73 are currently pending and have been examined.

Response to remarks/arguments

4. Applicant's remarks/arguments filed on 12/10/2018 with respect to the rejection of claims 20-73 have been fully considered but they are not persuasive.

5. On pages 2-7 of Applicant's remarks dated 12/10/2018, Applicant submits that ***the Dolganow and Nguyen references are directed towards respectively different purposes and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined.***

6. In response to applicant's argument that *Dolganow and Nguyen references* are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for

rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the combination of Dolganow and Nguyen allows for efficient deep packet inspection of traffic in cloud-based networks utilizing software defined networks (SDN).

7. In response to applicant's argument that Dolganow and Nguyen references are directed towards respectively different structures, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Moreover, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

8. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case,

the motivation to do so is found in Nguyen's reference, such that to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality. Such an advantage would include a flow-based handler receiving a packet, and determining that the packet is associated with a flow session and associating the rules with the packet.

9. **Regarding claim 1**, it is noted that claim 1 has been canceled by an Applicant preliminary amendment. The limitations argued by Applicant are disclosed in claim 20. On pages 7-9 of Applicants' remarks dated 12/10/2018, Applicant states that the office action has not addressed the limitation of: "... sending, by the controller to the network node the packet network, an instruction and a packet-applicable criterion", and "... receiving, by the network node from the controller, the instruction and the criterion", in particular fails to disclose any controller in general or any "an instruction and a packet-applicable criterion", as explicitly recited in claim 20.

10. In response to applicants' remarks, the Examiner respectfully disagrees because by virtue of performing sending and/or receiving implicitly implies the use of a controller. Although the Dolganow's reference does not explicitly disclose the controller, however, a machine-readable medium does inherently comprise a controller in order for it to function (i.e., sending and/or receiving). Moreover, Dolganow further discloses a method of sending/or receiving instructions encoded on a machine-readable medium, or a combination thereof, such that DPI devices 134, 136 may be configured to examine data packets sent to router/switch 132 to identify information associated with the packets, see at least paragraphs 12, 13, 28-31.

11. For at least the reasons provided above, applicants' remarks regarding independent claim 20 is not persuasive. Then independent claim 20 is not allowable over the cited prior art of record. Therefore, its dependent claims directly or indirectly are also not allowable based at least for the reasons provided above. Please see the rejection below.

Claim Rejections - 35 USC § 103

12. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

13. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
15. This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

16. Claims 20-73 is/are rejected under 35 U.S.C. 103 as being unpatentable over Dolganow et al. (US 2010/0208590 A1) in view of Nguyen et al. (US 2014/0052836 A1).

Regarding claim 20, Dolganow discloses a method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller, the method comprising: sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion (**Dolganow, para. 30; DPI devices 134, 136 may include hardware, instructions encoded on a machine-readable medium, or a combination thereof, such that DPI devices 134, 136 may be configured to examine data packets sent to router/switch 132 to identify information associated with the**

packets); receiving, by the network node from the controller, the instruction and the criterion (**Dolganow, para. 12, 30, 81; receiving all relevant information associated with the packets**); receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity (**Dolganow, para. 59: network element 130a, 130b may receive a number of packets belonging to an IP flow between a P2P client 110 and a P2P central entity 150**).

Dolganow does not appear to explicitly disclose checking, by the network node, if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, in response to the instruction.

Nguyen from similar field of endeavor discloses checking, by the network node, if the packet satisfies the criterion (**Nguyen, para. 32: determining if the packet satisfies the criterion**); responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity (**Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing, and/or a variety of other flow processing actions if not satisfying the criterion**); and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, in response to the instruction (**Nguyen, para. 21: Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing if the packet that satisfies the criteria in the matching filter**).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow

with the teaching of Nguyen by using the above features into the system of Dolganow such as checking, by the network node, if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, in response to the instruction as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 21 and 52, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the instruction is 'probe', 'mirror', or 'terminate' instruction, and upon receiving by the network node the 'terminate' instruction, the method further comprising blocking, by the network node, the packet from being sent to the second entity and to the controller (**Dolganow, para. 50: this transmission may be accomplished by mirroring (i.e., duplicating) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. Alternatively, this transmission may be accomplished by redirecting (i.e., rerouting) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. As another alternative, DPI A 134 may build and send a message including the required information to DPI B 136).**

Dolganow does not appear to disclose the packet is being sent to the controller.

Nguyen discloses the packet is being sent to the controller (**Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 22 and 53, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the instruction is a 'probe', a 'mirror', or a 'terminate' instruction, and upon receiving by the network node the 'mirror' instruction and responsive to the packet satisfying the criterion, the method further comprising sending the packet, by the network node, to the second entity and to the controller **(Dolganow, para. 50, 59: Alternatively, this transmission may be accomplished by redirecting (i.e., rerouting) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. As another alternative, DPI A 134 may build and send a message including the required information to DPI B 136).**

Dolganow does not appear to disclose the packet is being sent to the controller.

Nguyen discloses the packet is being sent to the controller **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Nguyen. The motivation for

doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 23 and 54, Dolganow as modified by Nguyen discloses the method according to claim 20, however, Nguyen further discloses wherein the instruction is 'probe' , 'mirror', or 'terminate' instruction, and upon receiving by the network node the 'probe' instruction and responsive to the packet satisfying the criterion, the method further comprising: sending the packet, by the network node, to the controller **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**; responsive to receiving the packet, analyzing the packet, by the controller **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**; sending the packet, by the controller, to the network node; and responsive to receiving the packet, sending the packet, by the network node, to the second entity **(Nguyen, para. 21: Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing if the packet that satisfies the criteria in the matching filter)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 24, 25 and 55, Dolganow as modified by Nguyen discloses the method according to claim 20, further comprising responsive to the packet satisfying the criterion and to the instruction, sending the packet or a portion thereof, by the network node, to the controller **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 26 and 56, Dolganow as modified by Nguyen discloses the method according to claim 24, however, Nguyen further comprising responsive to the packet satisfying the criterion and to the instruction, sending a portion of the packet, by the network node, to the controller **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 27 and 57, Dolganow as modified by Nguyen discloses the method according to claim 26, wherein the portion of the packet consists of multiple consecutive bytes, and wherein the instruction comprises identification of the consecutive bytes in the packet (**Dolganow, para. 69: DPI B 136 performs deep packet inspection on the packets relating to the request to attempt to extract a key identifying the P2P content transmitted in the flow. For example, when the protocol is BitTorrent, DPI B 136 may perform deep packet inspection to determine whether an info_hash field is present in the packets of the flow**).

Regarding claim 28, Dolganow as modified by Nguyen discloses the method according to claim 24, however, Nguyen further comprising responsive to receiving the packet, analyzing the packet, by the controller (**Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet**).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as analyzing the packet, by the controller as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claim 29, Dolganow as modified by Nguyen discloses the method according to claim 28, However, Nguyen further for use with an application server that

communicates with the controller, wherein the analyzing comprising sending the packet, by the controller, to the application server, and analyzing the packet by the application server **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet, by the controller, to the application server, and analyzing the packet by the application server as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claim 30, Dolganow as modified by Nguyen discloses the method according to claim 29, however, Nguyen wherein the analyzing further comprising sending the packet after analyzing by the application server to the controller, and sending the packet, after receiving from the controller by the network node, to the second entity **(Nguyen, Fig. 2, para. 19: controller API 210 to receive and manage the packet)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as sending the packet, by the controller, to the application server, and analyzing the packet by the application server as taught by Nguyen. The motivation for doing so

would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claim 31, Dolganow as modified by Nguyen discloses the method according to claim 28, wherein the analyzing comprises applying security or data analytic application (**Dolganow, Fig. 4A, para. 60: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows**).

Regarding claim 32, Dolganow as modified by Nguyen discloses the method according to claim 28, wherein the analyzing comprises applying security application that comprises firewall or intrusion detection functionality (**Dolganow, Fig. 4A, para. 60: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows**).

Regarding claim 33, Dolganow as modified by Nguyen discloses the method according to claim 28, wherein the analyzing comprises performing Deep Packet Inspection (DPI) or using a DPI engine on the packet (**Dolganow, para. 12: performing DPI to extract a key from one or more of the first plurality of packets**).

Regarding claim 34, Dolganow as modified by Nguyen discloses the method according to claim 28, wherein the packet comprises distinct header and payload fields, and wherein the analyzing comprises checking part of, or whole of, the payload field **(Dolganow, para. 52-54, 57: Key field 210 may indicate the value of a key used to uniquely identify a P2P content item. This field 210 may be populated when extracted from a request sent from P2P client 110 to P2P central entity 150, provided that the request includes the key).**

Regarding claims 35 and 58, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises one or more flag bits, and wherein the packet-applicable criterion is that one or more of the flag bits is set **(Dolganow, para. 34, 43: P2P central entity 150 may be a BitTorrent tracker configured to receive a request including an info_hash from P2P client 110 and respond with a list containing location information of P2P client peers 160 that maintain the requested P2P content).**

Regarding claims 36 and 59, Dolganow as modified by Nguyen discloses the method according to claim 35, wherein the packet is an Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof **Nguyen, para. 17, 30: control packets typically carry device control information or communication protocol data that allows devices to communicate packet**

forwarding logic with each other, routing and discovery protocol, data packets that requirement additional attention, processing configurations, device configurations, and/or a variety of other control packet information known in the art).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as the packet is a Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 37 and 60, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises at least the first and second entities addresses in the packet network, and wherein the packet-applicable criterion is that the first entity address, the second entity address, or both match a predetermined address or addresses **(Dolganow, para. 39, 55, 62: DPI A 134 may determine whether the source or destination address of the packets is the address of a system known to operate as a P2P central entity 150, such as a BitTorrent tracker. Suitable alternatives for determining whether the exchange is between a P2P client 110 and a P2P central entity 150 will be apparent to those of skill in the art).**

Regarding claims 38 and 61, Dolganow as modified by Nguyen discloses the method according to claim 37, wherein the addresses are Internet Protocol (IP) addresses (**Dolganow, para. 39, 55, 62: addresses are IP addresses**).

Regarding claims 39 and 62, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the packet is an Transmission Control Protocol (TCP) packet that comprises source and destination TCP ports, a TCP sequence number, and a TCP sequence mask fields, and wherein the packet-applicable criterion is that the source TCP port, the destination TCP port, the TCP sequence number, the TCP sequence mask, or any combination thereof, matches a predetermined value or values (**Dolganow, para. 39, 55, 62: It should be apparent that an IP flow may be any IP flow between P2P client 110 and P2P central entity 150 or P2P client 110 and a P2P client peer 160, as identifiable by IP 5-tuple information, which includes the source IP address, source port, destination IP address, destination port, and protocol of the IP flow. This IP flow may be further tunneled inside another networking layer, such as IP, Ethernet, ATM, and the like**).

Regarding claims 40 and 63, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the packet network comprises a Wide Area Network (WAN), Local Area Network (LAN), the Internet, Metropolitan Area Network (MAN), Internet Service Provider (ISP) backbone, datacenter network, or inter-datacenter network (**Dolganow, Figs 1, 2, para. 28: Network element 130a may be**

an entity containing components configured to receive, process, and forward packets belonging to an IP flow received from packet-switched network 120. As an example, network element 130a may be owned and/or operated by an Internet Service Provider (ISP) providing services to P2P client 110. Network element 130a may include a router/switch 132, DPI A 134, DPI B 136, and key storage module 138).

Regarding claims 41 and 64, Dolganow as modified by Nguyen discloses the (New) The method according to claim 20, wherein the first entity is a server device and the second entity is a client device, or wherein the first entity is a client device and the second entity is a server device **(Dolganow, Fig. 1: entity 150 is a central entity (such as a server) and entity 160 is a client device).**

Regarding claims 42 and 65, Dolganow as modified by Nguyen discloses the method according to claim 41, wherein the server device comprises a web server, and wherein the client device comprises a smartphone, a tablet computer, a personal computer, a laptop computer, or a wearable computing device **(Dolganow, para. 34: P2P central entity 150 may store a database of information maintained within a particular P2P network, such that a user may search P2P central entity 150 to determine the location of desired content based on the file key).**

Regarding claims 43 and 66, Dolganow as modified by Nguyen discloses the method according to claim 41, wherein the communication between the network node

and the controller is based on, or uses, a standard protocol (**Dolganow, Fig. 2, para. 18: the OpenFlow communications protocol, separate the data plane and the control plane, with the data plane remaining on the networking device and the control plane (containing the routing protocol and forwarding logic) moved to a controller platform typically running on an IHS coupled to the networking device).**

Regarding claims 44 and 67, Dolganow as modified by Nguyen discloses the method according to claim 43, Nguyen further discloses wherein the standard protocol is according to, based on, or compatible with, an OpenFlow protocol version 1.3.3 or 1.4.0 (**Nguyen, para. 19, 30: standard protocol is according to an OpenFlow protocol).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as the standard protocol is according to, based on, or compatible with, an OpenFlow protocol as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 45 and 68, Dolganow as modified by Nguyen discloses the method according to claim 44, wherein the instruction comprises a Type-Length-Value (TLV) structure (**Dolganow, para. 53: Key field 210 may indicate the value of a key used to uniquely identify a P2P content item. This field 210 may be populated**

when extracted from a request sent from P2P client 110 to P2P central entity 150, provided that the request includes the key).

Regarding claims 46 and 69, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the network node comprises a router, a switch, or a bridge (**Dolganow, Fig. 1, para. 25, 27: network element 130a may include a router, a switch, or a bridge**).

Regarding claims 47 and 70, Dolganow as modified by Nguyen discloses the method according to claim 20, wherein the packet network is an Internet Protocol (IP) network, and the packet is an IP packet (**Dolganow, para. 60, 62: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows**).

Regarding claims 48 and 71, Dolganow as modified by Nguyen discloses the method according to claim 47, wherein the packet network is an Transmission Control Protocol (TCP) network, and the packet is an TCP packet (**Dolganow, para. 39, 55, 62: It should be apparent that an IP flow may be any IP flow between P2P client 110 and P2P central entity 150 or P2P client 110 and a P2P client peer 160, as identifiable by IP 5-tuple information, which includes the source IP address, source port, destination IP address, destination port, and protocol of the IP flow.**

This IP flow may be further tunneled inside another networking layer, such as IP, Ethernet, ATM, and the like).

Regarding claims 49 and 72, Dolganow as modified by Nguyen discloses the method according to claim 20, further comprising: receiving, by the network node from the first entity over the packet network, one or more additional packets **(Dolganow, para. 12: a network element may receive a first and second plurality of packets transmitted between a peer-to-peer (P2P) client and a P2P central entity)**.

Dolganow does not appear to explicitly disclose checking, by the network node, if any one of the one or more additional packets satisfies the criterion; responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity; and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction.

Nguyen from similar field of endeavor discloses checking, by the network node, if any one of the one or more additional packets satisfies the criterion **(Nguyen, para. 32: determining if more packets satisfy the criterion)**; responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity **(Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing, and/or a variety of other flow processing actions if not satisfying the criterion)**; and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction **(Nguyen, para. 21: Nguyen, Fig. 3, para. 21: sending the**

additional packets to the next table for processing if the packet that satisfies the criteria in the matching filter).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as checking, by the network node, if any one of the one or more additional packets satisfies the criterion; responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity; and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claims 50 and 73, Dolganow as modified by Nguyen discloses the method according to claim 20, Nguyen further discloses wherein the packet network is a Software Defined Network (SDN), the packet is routed as part of a data plane and the network node communication with the controller serves as a control plane **(Nguyen, para. 17, 18: a data plane or fast processing path where data packets are received, queued, processed, and then forwarded to the appropriate destination, and a control plane or slow processing path where communication protocols, configuration, and administration takes place).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as the packet network is a Software Defined Network (SDN), the packet is routed as part of a data plane and the network node communication with the controller serves as a control plane as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Regarding claim 51, Dolganow discloses a method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller, the method by the network node comprising: receiving, from the controller, the instruction and the criterion (**Dolganow, para. 30; DPI devices 134, 136 may include hardware, instructions encoded on a machine-readable medium, or a combination thereof, such that DPI devices 134, 136 may be configured to examine data packets sent to router/switch 132 to identify information associated with the packets**); receiving, from the first entity over the packet network, a packet addressed to the second entity (**Dolganow, para. 59; network element 130a, 130b may receive a number of packets belonging to an IP flow between a P2P client 110 and a P2P central entity 150**).

Dolganow does not appear to explicitly disclose checking if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending over the

packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet over the packet network, in response to the instruction.

Nguyen from similar field of endeavor discloses checking if the packet satisfies the criterion **(Nguyen, para. 32: determining if the packet satisfies the criterion)**; responsive to the packet not satisfying the criterion, sending over the packet network, the packet to the second entity **(Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing, and/or a variety of other flow processing actions if not satisfying the criterion)**; and responsive to the packet satisfying the criterion, sending the packet over the packet network, in response to the instruction **(Nguyen, para. 21: Nguyen, Fig. 3, para. 21: sending the packet to the next table for processing if the packet that satisfies the criteria in the matching filter)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Nguyen by using the above features into the system of Dolganow such as checking if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet over the packet network, in response to the instruction as taught by Nguyen. The motivation for doing so would have been to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN F VOLTAIRE whose telephone number is (571)272-3953. The examiner can normally be reached on M-F 9:00-6:45 PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FARUK HAMZA can be reached on (571)272-7969. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2466

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEAN F VOLTAIRE/
Examiner, Art Unit 2466

/FARUK HAMZA/
Supervisory Patent Examiner, Art Unit 2466

<i>Notice of References Cited</i>	Application/Control No. 15/126,288		Applicant(s)/Patent Under Reexamination BARSHESHET et al.	
	Examiner JEAN F VOLTAIRE		Art Unit 2466	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100208590-A1	08-2010	Dolganow; Andrew	H04L43/026	370/235
*	B	US-20140052836-A1	02-2014	Nguyen; Cuong	H04L45/306	709/223
*	C	US-20150124812-A1	05-2015	Agarwal; Kanak B.	H04L45/24	370/392
*	D	US-20160020998-A1	01-2016	BIFULCO; Roberto	H04L45/64	370/235
*	E	US-20160197831-A1	07-2016	DE FOY; Xavier	H04L45/7453	370/392
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20190326

<i>Search Notes</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CPC - Searched*		
Symbol	Date	Examiner
H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161	08/29/2018	JV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
370	389	08/29/2018	JV

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Inventorship search for double patenting issue	08/29/2018	JV
Text search in East	08/29/2018	JV
Text search in 3gpp.org, ieee.org, google.com for NPL publication	08/29/2018	JV
Consulted with primary examiner Candal Elpenord	08/24/2018	JV
Update text search	03/27/2019	JV
Consulted with Jae Y LEE	03/28/2019	JV

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466	
--	--

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	07/21/2018	03/26/2019							
	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	✓	✓							
	29	✓	✓							
	30	✓	✓							
	31	✓	✓							
	32	✓	✓							
	33	✓	✓							
	34	✓	✓							
	35	✓	✓							
	36	✓	✓							
	37	✓	✓							
	38	✓	✓							
	39	✓	✓							
	40	✓	✓							
	41	✓	✓							
	42	✓	✓							

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CLAIM		DATE									
Final	Original	07/21/2018	03/26/2019								
	43	✓	✓								
	44	✓	✓								
	45	✓	✓								
	46	✓	✓								
	47	✓	✓								
	48	✓	✓								
	49	✓	✓								
	50	✓	✓								
	51	✓	✓								
	52	✓	✓								
	53	✓	✓								
	54	✓	✓								
	55	✓	✓								
	56	✓	✓								
	57	✓	✓								
	58	✓	✓								
	59	✓	✓								
	60	✓	✓								
	61	✓	✓								
	62	✓	✓								
	63	✓	✓								
	64	✓	✓								
	65	✓	✓								
	66	✓	✓								
	67	✓	✓								
	68	✓	✓								
	69	✓	✓								
	70	✓	✓								
	71	✓	✓								
	72	✓	✓								
	73	✓	✓								

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	370/389.ccls. and DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
L2	776	DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
L7	815	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/04/12 21:25
L8	249	DPI same (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:27
L9	460	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
L10	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
L11	403	"7852767" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20080049628" "20120230328" "20120314573" "20030108030" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:30

		"20080049637" "20160113006" "8358580" "9602265" "8520603" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677"				
L12	73	"9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:31
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:04
S7	3	"20130329734"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:05

S8	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:12

		"20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637" "20160113006" "8358580" "9602265" "8520603" "20180077229" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677" "20120236750" "9240906" "8576722" "9621361" "20080049745" "20080049747" "9473985" "20170201979" "20120127882" "20170142165" "8787303" "9042370" "8619596" "20120201139" "20080002676" "7808918" "20150312283" "9231820" "20130322432" "8307065" "20080002716" "9054986" "20140043977" "8619820" "9241277" "20120330804" "20160249248" "20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:13

		"20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"				
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/08/14 20:18

			DERWENT; IBM_TDB			
S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/14 20:21

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:22
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S40	91	S37 and (SDN) same (packet PDU near2	US-PGPUB;	OR	OFF	2018/08/24

		(flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:27
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/27 07:46

			IBM_TDB			
S49	39979	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:49
S55	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S56	1	"20170099196"	DERWENT	OR	OFF	2019/03/27 16:32
S57	1	"20100208590"	DERWENT	OR	OFF	2019/03/27 16:33
S58	1	"20140052836"	DERWENT	OR	OFF	2019/03/27 16:33
S59	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 16:59
S60	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2019/03/27 17:04

			EPO; JPO; DERWENT; IBM_TDB			
S61	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S62	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S63	4	S62 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S64	1524	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"				
S65	370	"20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S66	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S67	104	S66 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2019/03/27 22:42

			IBM_TDB			
S68	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S69	478	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S70	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S71	17590	370/389.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S72	1	"15497119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 10:50
S73	2	"15769777"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 13:55

4/ 12/ 2019 9:36:45 PM

C:\Users\jvoltage\Documents\EAST\Workspaces\15126288.wsp

Discover

Pat. & Apps

sending, by the controller t...

+ 0 mods

0 filters

STIC

Visuals

Query

Results

0 Selected

Sort: Relevance

Cut-off: None

De-dup: None

1 - 50

14,438,730 results

Top 1500 results

1. A method and system for deep packet inspection in software defined networks

A method for deep packet inspection (DPI) in a software defined network (SDN). The method includes configuring a plurality of network nodes operable in the SDN with at least one probe instruction; receiving from a network node a first packet of a flow, the first packet matches the at least one probe...

CURRENT ASSIGNEES: ORCKIT CORRIGENT LTD [+1]
US20170093196 | US APPLICATIONS | 06-APR-2017

2. Selective bicasting

A method including receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA TECH OY
US9391912 | US PATENTS | 12-JUL-2016

3. Selective Bicasting

A method including receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA TECH OY
US20150117313 | US APPLICATIONS | 30-APR-2015

4. Selective bicasting

A method comprising: receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA SOLUTIONS & NETWORKS OY
EP2847877A1 | EPO APPLICATIONS | 18-MAR-2015

5. Selective bicasting

A method comprising: receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA SOLUTIONS & NETWORKS OY
WO2013167360A1 | WIPO APPLICATIONS | 14-NOV-2013

6. User Defined Objects for Network Devices

Provided are systems and methods for configuring a network servicing node with user-defined instruction scripts. A method for configuring a network servicing node with user-defined instruction scripts may commence with receiving, from a user of the network servicing node, a user loadable program...

CURRENT ASSIGNEES: A10 NETWORKS INC
US20190089587 | US APPLICATIONS | 21-MAR-2019

7. Lookahead computation of routing information

Relevance

VIEW

0 Results

29 Results

1471 Results

0 Results

0 Results

Publication Date

VIEW

1992

2019

Cur Assignee by Relevance

VIEW

ORCKIT CORRIGENT LTD (2)

NOKIA TECH OY (12)

NOKIA SOLUTIONS & NET... (30)

A10 NETWORKS INC (15)

ALCATEL LUCENT (27)

TELEFON AB LM ERICSSON... (262)

NOKIA CORP (36)

TELEFON AB LM ERICSSON... (43)

View More Visualizations

Result #1

PREV

NEXT

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
L2	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
L3	4	L2 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
L4	1524	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"				
L5	370	"20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
L6	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2019/03/27 22:42

			IBM_TDB			
L7	104	L6 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
L8	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
L9	478	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
L10	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
L11	17590	370/389.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	OFF	2018/08/14 20:00

			EPO; JPO; DERWENT; IBM_TDB			
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:04
S7	3	"20130329734"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:05
S8	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:12

"8036107" "20130152187"
"20130121298" "9220110" "8677489"
"8577363" "20080049619"
"20020196789" "20130198805"
"20120142341" "20180167337"
"6965666" "9277538" "10027559"
"20160127223" "20170331750"
"7852767" "20170104692" "6400681"
"20150089048" "20150207724"
"20140304776" "7917471"
"20150085655" "7116661" "9894694"
"20140194068" "20150305006"
"20180167987" "20080052387"
"20130100797" "20120201140"
"20150295808" "20150207677"
"9667556" "20150365879"
"20150304209" "20140297847"
"9485185" "20110116405" "9100285"
"20160278140" "20170317933"
"20170063660" "20080049624"
"5282270" "20080049769"
"20180091388" "9088581" "8780721"
"20100085887" "20140064086"
"9479506" "9661514" "20100054140"
"9872185" "8743703" "20130322265"
"9112729" "20110238985"
"20080052401" "8670313"
"20140050106" "20140043999"
"20080052394" "20110289578"
"20080049776" "20170257319"
"20140071977" "20160134502"
"20080049615" "9979595"
"20120230214" "20150365846"
"20160344611" "20080049628"
"20120230328" "20120314573"
"20030108030" "20080049746"
"20080049777" "20120257617"
"20140064100" "20160080272"
"20160112896" "20070076653"
"20080049630" "20130033984"
"7933214" "20130003538" "7203190"
"20120127881" "20080049748"
"20140092723" "20110032821"
"20130135993" "20080052393"
"9596169" "20140321273" "8687614"
"20080052206" "20090067399"
"20080049649" "20170324674"
"9479341" "20110317580"
"20080049640" "20120236729"
"20170310600" "9014204"
"20130322249" "20080049753"
"20160057062" "20160044095"
"7684332" "20150295998"
"20120082161" "20130294243"
"20170339217" "8015294"
"20150110097" "20080049775"
"20120182864" "20140226485"
"20080049632" "8194555" "8223654"
"20120321052" "20080049637"
"20160113006" "8358580" "9602265"
"8520603" "20180077229"
"20080049626" "9253661"
"20150138955" "20120327816"
"20160380878" "20080002677"

		"20120236750" "9240906" "8576722" "9621361" "20080049745" "20080049747" "9473985" "20170201979" "20120127882" "20170142165" "8787303" "9042370" "8619596" "20120201139" "20080002676" "7808918" "20150312283" "9231820" "20130322432" "8307065" "20080002716" "9054986" "20140043977" "8619820" "9241277" "20120330804" "20160249248" "20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:13

		"20140092723" "20110032821" "20130135993"				
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"				
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15

		"20130100797"				
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/14 20:20

			IBM_TDB			
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	OFF	2018/08/24 11:22

			EPO; JPO; DERWENT; IBM_TDB			
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S40	91	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:27
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT;	OR	OFF	2018/08/27 07:46

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S49	39979	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:49

EAST Search History

S55	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S56	1	"20170099196"	DERWENT	OR	OFF	2019/03/27 16:32
S57	1	"20100208590"	DERWENT	OR	OFF	2019/03/27 16:33
S58	1	"20140052836"	DERWENT	OR	OFF	2019/03/27 16:33
S59	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 16:59
S60	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 17:04

3/ 27/ 2019 10:49:26 PM

C:\Users\jvoltaire\Documents\EAST\Workspaces\15126288.wsp

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)

Approved for use through 11/30/2020. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL **(Submitted Only via EFS-Web)**

Application Number	15/126,288	Filing Date	2016-09-15	Docket Number (if applicable)	ORCKIT-001-US	Art Unit	2466
First Named Inventor	Yossi BARSHESHET			Examiner Name	VOLTAIRE, JEAN F		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to
 Deposit Account No 600117

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)

Approved for use through 11/30/2020. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	Yehuda Binder/	Date (YYYY-MM-DD)	2019-05-07
Name	BINDER Yehuda	Registration Number	73612

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal				
Application Number:		15126288		
Filing Date:		15-Sep-2016		
Title of Invention:		A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS		
First Named Inventor/Applicant Name:		Yossi BARSHESET		
Filer:		Yehuda Binder/Dorit Binder		
Attorney Docket Number:		ORCKIT-001-US		
Filed as Small Entity				
Filing Fees for U.S. National Stage under 35 USC 371				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
RCE- 1ST REQUEST	2801	1	650	650
Total in USD (\$)				650

Electronic Acknowledgement Receipt	
EFS ID:	35933135
Application Number:	15126288
International Application Number:	
Confirmation Number:	9263
Title of Invention:	A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS
First Named Inventor/Applicant Name:	Yossi BARSHESET
Customer Number:	131926
Filer:	Yehuda Binder/Dorit Binder
Filer Authorized By:	Yehuda Binder
Attorney Docket Number:	ORCKIT-001-US
Receipt Date:	07-MAY-2019
Filing Date:	15-SEP-2016
Time Stamp:	04:40:56
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 650
RAM confirmation Number	050719INTEFSW00007838600117
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	sb0030-RCE.pdf	1349928	no	3
			aaaf83b971c9d9f0d4ba4c519f2a87b3df668930		
Warnings:					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	RCE-5-2019-FOA-Response.pdf	85356	no	21
			a9a609262007adc7131f537bd7cc4887ad29fcdde		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30275	no	2
			6120917of967c774515c2313f323281eeae6495ca		
Warnings:					
Information:					
Total Files Size (in bytes):			1465559		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: ORCKIT-001-US

In re Application of:	)	Confirmation No. 9263
	)	
Ronen Solomon	)	Art Unit: 2466
	)	
Appln. No.: 15/126,288	)	Examiner: Voltaire, Jean F.
	)	
Filed: September 15, 2016	)	Washington, D.C.
	)	
For: A METHOD AND SYSTEM FOR		
DEEP PACKET INSPECTION ...	)	May 7, 2019
	)	

AMENDMENT

Customer Service Window, Mail Stop Amendment
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, 401 Dulany Street
Alexandria, Virginia 22314

Sir:

This is in response to the examiner's action of
April 15, 2019 ("Action").

Amendments to the **Claims** appear in the Listing of
Claims that begins on page 2 of this paper.

Remarks / Arguments begin on page 12 of this paper.

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1-19. (canceled)

20. (Currently amended) A method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method comprising:

 sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion;

 receiving, by the network node from the controller, the instruction and the criterion; receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity;

 checking, by the network node, if the packet satisfies the criterion;

 responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and

 responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, ~~in response to the instruction.~~ to an entity that is included in the instruction and is other than the second entity.

21. (Previously presented) The method according to claim 20, wherein the instruction is `probe`, `mirror`, or `terminate` instruction, and upon receiving by the network node the `terminate` instruction, the method further comprising

blocking, by the network node, the packet from being sent to the second entity and to the controller.

22. (Previously presented) The method according to claim 20, wherein the instruction is a `probe`, a `mirror`, or a `terminate` instruction, and upon receiving by the network node the `mirror` instruction and responsive to the packet satisfying the criterion, the method further comprising sending the packet, by the network node, to the second entity and to the controller.

23. (Previously presented) The method according to claim 20, wherein the instruction is `probe`, `mirror`, or `terminate` instruction, and upon receiving by the network node the `probe` instruction and responsive to the packet satisfying the criterion, the method further comprising: sending the packet, by the network node, to the controller; responsive to receiving the packet, analyzing the packet, by the controller; sending the packet, by the controller, to the network node; and responsive to receiving the packet, sending the packet, by the network node, to the second entity.

24. (Previously presented) The method according to claim 20, further comprising responsive to the packet satisfying the criterion and to the instruction, sending the packet or a portion thereof, by the network node, to the controller.

25. (Previously presented) The method according to claim 24, further comprising storing the received packet or a portion thereof, by the controller, in a memory.

26. (Previously presented) The method according to claim 24, further comprising responsive to the packet satisfying the criterion and to the instruction, sending a portion of the packet, by the network node, to the controller.

27. (Previously presented) The method according to claim 26, wherein the portion of the packet consists of multiple

consecutive bytes, and wherein the instruction comprises identification of the consecutive bytes in the packet.

28. (Previously presented) The method according to claim 24, further comprising responsive to receiving the packet, analyzing the packet, by the controller.

29. (Previously presented) The method according to claim 28, further for use with an application server that communicates with the controller, wherein the analyzing comprising sending the packet, by the controller, to the application server, and analyzing the packet by the application server.

30. (Previously presented) The method according to claim 29, wherein the analyzing further comprising sending the packet after analyzing by the application server to the controller, and sending the packet, after receiving from the controller by the network node, to the second entity.

31. (Previously presented) The method according to claim 28, wherein the analyzing comprises applying security or data analytic application.

32. (Previously presented) The method according to claim 28, wherein the analyzing comprises applying security application that comprises firewall or intrusion detection functionality.

33. (Previously presented) The method according to claim 28, wherein the analyzing comprises performing Deep Packet Inspection (DPI) or using a DPI engine on the packet.

34. (Previously presented) The method according to claim 28, wherein the packet comprises distinct header and payload fields, and wherein the analyzing comprises checking part of, or whole of, the payload field.

35. (Previously presented) The method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises one or more flag bits, and wherein the packet-applicable criterion is that one or more of

the flag bits is set.

36. (Previously presented) The method according to claim 35, wherein the packet is an Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof.

37. (Previously presented) The method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises at least the first and second entities addresses in the packet network, and wherein the packet-applicable criterion is that the first entity address, the second entity address, or both match a predetermined address or addresses.

38. (Previously presented) The method according to claim 37, wherein the addresses are Internet Protocol (IP) addresses.

39. (Previously presented) The method according to claim 20, wherein the packet is an Transmission Control Protocol (TCP) packet that comprises source and destination TCP ports, a TCP sequence number, and a TCP sequence mask fields, and wherein the packet-applicable criterion is that the source TCP port, the destination TCP port, the TCP sequence number, the TCP sequence mask, or any combination thereof, matches a predetermined value or values.

40. (Previously presented) The method according to claim 20, wherein the packet network comprises a Wide Area Network (WAN), Local Area Network (LAN), the Internet, Metropolitan Area Network (MAN), Internet Service Provider (ISP) backbone, datacenter network, or inter-datacenter network.

41. (Previously presented) The method according to claim 20, wherein the first entity is a server device and the second entity is a client device, or wherein the first entity is a client device and the second entity is a server device.

42. (Previously presented) The method according to claim 41, wherein the server device comprises a web server, and wherein the client device comprises a smartphone, a tablet computer, a personal computer, a laptop computer, or a wearable computing device.

43. (Previously presented) The method according to claim 41, wherein the communication between the network node and the controller is based on, or uses, a standard protocol.

44. (Previously presented) The method according to claim 43, wherein the standard protocol is according to, based on, or compatible with, an OpenFlow protocol version 1.3.3 or 1.4.0.

45. (Previously presented) The method according to claim 44, wherein the instruction comprises a Type-Length-Value (TLV) structure.

46. (Previously presented) The method according to claim 20, wherein the network node comprises a router, a switch, or a bridge.

47. (Previously presented) The method according to claim 20, wherein the packet network is an Internet Protocol (IP) network, and the packet is an IP packet.

48. (Previously presented) The method according to claim 47, wherein the packet network is an Transmission Control Protocol (TCP) network, and the packet is an TCP packet.

49. (Previously presented) The method according to claim 20, further comprising:

receiving, by the network node from the first entity over the packet network, one or more additional packets; checking, by the network node, if any one of the one or more additional packets satisfies the criterion;

responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity; and

responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction.

50. (Previously presented) The method according to claim 20, wherein the packet network is a Software Defined Network (SDN), the packet is routed as part of a data plane and the network node communication with the controller serves as a control plane.

51. (Currently amended) A method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method by the network node comprising:

receiving, from the controller, the instruction and the criterion;

receiving, from the first entity over the packet network, a packet addressed to the second entity;

checking if the packet satisfies the criterion;
responsive to the packet not satisfying the criterion, sending over the packet network, the packet to the second entity; and

responsive to the packet satisfying the criterion,
sending the packet over the packet network, ~~in response to the instruction.~~ to an entity that is included in the instruction and is other than the second entity.

52. (Previously presented) The method according to claim 51, wherein the instruction is `probe`, `mirror`, or `terminate` instruction, and upon receiving the `terminate` instruction, the method further comprising blocking, the packet from being sent to the second entity and to the controller.

53. (Previously presented) The method according to claim 51, wherein the instruction is a `probe`, a `mirror`, or a `terminate` instruction, and upon receiving the `mirror` instruction and responsive to the packet satisfying the criterion, the method further comprising sending the packet to the second entity and to the controller.

54. (Previously presented) The method according to claim 51, wherein the instruction is `probe`, `mirror`, or `terminate` instruction, and upon receiving the `probe` instruction and responsive to the packet satisfying the criterion, the method further comprising: sending the packet to the controller;

receiving the packet, from the controller; and responsive to receiving the packet, sending the packet, to the second entity.

55. (Previously presented) The method according to claim 51, further comprising responsive to the packet satisfying the criterion and to the instruction, sending the packet or a portion thereof to the controller.

56. (Previously presented) The method according to claim 55, further comprising responsive to the packet satisfying the criterion and to the instruction, sending a portion of the packet to the controller.

57. (Previously presented) The method according to claim 56, wherein the portion of the packet consists of multiple consecutive bytes, and wherein the instruction comprises identification of the consecutive bytes in the packet.

58. (Previously presented) The method according to claim 51, wherein the packet comprises distinct header and payload fields, the header comprises one or more flag bits, and wherein the packet-applicable criterion is that one or more of the flag bits is set.

59. (Previously presented) The method according to claim 58, wherein the packet is an Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof.

60. (Previously presented) The method according to claim 51, wherein the packet comprises distinct header and payload fields, the header comprises at least the first and second entities addresses in the packet network, and wherein the packet-applicable criterion is that the first entity address, the second entity address, or both match a predetermined address or addresses.

61. (Previously presented) The method according to claim 60, wherein the addresses are Internet Protocol (IP) addresses.

62. (Previously presented) The method according to claim 51, wherein the packet is an Transmission Control Protocol (TCP) packet that comprises source and destination TCP ports, a TCP sequence number, and a TCP sequence mask fields, and wherein the packet-applicable criterion is that the source TCP port, the destination TCP port, the TCP sequence number, the TCP sequence mask, or any combination thereof, matches a predetermined value or values.

63. (Previously presented) The method according to claim 51, wherein the packet network comprises a Wide Area Network (WAN), Local Area Network (LAN), the Internet, Metropolitan Area Network (MAN), Internet Service Provider (ISP) backbone, datacenter network, or inter-datacenter network.

64. (Previously presented) The method according to claim 51, wherein the first entity is a server device and the second entity is a client device, or wherein the first entity is a client device and the second entity is a server device.

65. (Previously presented) The method according to claim 64, wherein the server device comprises a web server, and wherein the client device comprises a smartphone, a tablet computer, a personal computer, a laptop computer, or a wearable computing device.

66. (Previously presented) The method according to claim 64, wherein the communication with the controller is based on, or uses, a standard protocol.

67. (Previously presented) The method according to claim 66, wherein the standard protocol is according to, based on, or compatible with, an OpenFlow protocol version 1.3.3 or 1.4.0.

68. (Previously presented) The method according to claim 67, wherein the instruction comprises a Type-Length-Value (TLV)

structure.

69. (Previously presented) The method according to claim 51, wherein the network node comprises a router, a switch, or a bridge.

70. (Previously presented) The method according to claim 51, wherein the packet network is an Internet Protocol (IP) network, and the packet is an IP packet.

71. (Previously presented) The method according to claim 70, wherein the packet network is a Transmission Control Protocol (TCP) network, and the packet is an TCP packet.

72. (Previously presented) The method according to claim 51, further comprising: receiving, from the first entity over the packet network, one or more additional packets; checking, if any one of the one or more additional packets satisfies the criterion; responsive to an additional packet not satisfying the criterion, sending over the packet network, the additional packet to the second entity; and responsive to the additional packet satisfying the criterion, sending the additional packet over the packet network, in response to the instruction.

73. (Previously presented) The method according to claim 51, wherein the packet network is a Software Defined Network (SDN), the packet is routed as part of a data plane and the communication with the controller serves as a control plane.

REMARKS / ARGUMENTS

The Examiner's Action dated April 15, 2019, has been received, and its content carefully noted.

Without agreeing with the Action, for the sake of furtherance of the prosecution, claim 20 is amended to recite that responsive to satisfying the criterion, the packet is sent to an entity other than the second entity to which the packet is addressed. It is noted that neither the Dolganow reference nor the Nguyen reference teach any sending of the packet to an entity or node that is not addressed to.

Office action, Section 12, pages 4-22

Claims 20-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolganow *et al.* (US 2010/0208590 - "Dolganow") in view of Nguyen *et al.* (US 2014/0052836 - "Nguyen").

Combining Dolganow and Nguyen.

a. The former Action clearly stated that the references are being in a 'similar field of endeavor'. However, the current Action seems to state that the references are analogous as solving the same problem of "... *efficient deep packet inspection of traffic in cloud-based networks utilizing software defined networks (SDN)*" (Section 6 of the Action). The Action is clearly improperly shifting its position' resulting in 'moving target rejections for [applicant] to traverse'. [See *In re Durance*, No. 2017-1486, 2018 (Fed. Cir. June 1, 2018)].

b. It is noted that the Dolganow reference is silent regarding any '*cloud-based networks*' or regarding any '*software defined*

networks (SDN)'. Similarly, the Nguyen reference does not mention or involves any '*cloud-based networks*' as stated in the problem definition. Hence, the stated problem is rendered moot regarding both references.

c. Further, claim 20 is clearly silent regarding any '*cloud-based networks*' or regarding any '*software defined networks (SDN)'*', rendering the stated problem moot regarding the present application.

d. Further, it would not be appropriate to base this rejection on a combination of these references because the devices and networks described in the Dolganow and Nguyen references are each self-contained and independently operate effectively to solve the stated problem of DPI of traffic, and:

Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.

[Kinetic Concepts v. Smith and Nephew, 688 F.3d 1342, at 1369 (CAFC, 2012).] - See MPEP §2143.01.

e. Applicant submits that the Dolganow and Nguyen references are directed towards respectively different purposes and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Dolganow reference involves DPI, where packets are handled based on their content, while the Nguyen reference involves SDN, where packets are handled based on externally received instructions. For example, the Dolganow reference involves **OSI Layer 3** or above analysis, while the Nguyen reference involves

local routing (**OSI Layer 2**) without any analysis of the packet content.

Further, while the Dolagnow reference is directed to **network traffic handling or routing devices**, such as routers or switches (Figure 1 and paragraphs 25 and 27), the Nguyen reference is directed to HIS which is an **end devices**, intended to generate of received information, such as 'personal computer, a PDA, a consumer electronic device, a display device' as described in Figure 1 and paragraph 0015.

Hence, the two references are directed to different devices having different functionalities and differently handling traffic, and thus cannot be combined. It is respectfully submitted that it is simply not appropriate to select a secondary reference that happens to disclose, in isolation, a single feature, and conclude, without a proper basis, that it would be obvious to add that feature to another device in a different field.

f. It is further noted that MPEP §808.02(A) explicitly recites that **different classes** "... shows that each invention has attained recognition in the art as a **separate subject** for inventive effort, and also a **separate field** of search." (Emphasis added). Furthermore, there is no suggestion or motivation to combine:

[W]hen art is directed to a different purpose then a claimed invention, an inventor would have less motivation or occasion to consider it.

In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992).

The Dolganow reference is classified under U.S. Class 370/235 associated with "MULTIPLEX COMMUNICATIONS - DATA FLOW CONGESTION PREVENTION OR CONTROL", mainly focusing on regulating the amount of information transmitted through the

network, while the Nguyen reference is classified under U.S. Class 709/223 associated with "ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING" - relating mainly to the managing the resources of the computers connected by a computer network. Thus, the two reference are in different fields.

g. The Action fails to explain HOW the device described in the Dolganow reference is being modified to include the limitations taught by the Nguyen reference. The Action only states that the missing limitations are disclosed by the Nguyen reference and as such may be combined. A clear explanation is required according to the rules.

Rationale for Combining Dolganow and Nguyen.

a. The rationale for combining is stated on page 6 as "... to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality". Assuming *arguendo* that such combination is properly made in accordance with prevailing U.S. patent law, it is respectfully submitted that SDN functionality is a technical functionality *per se*, and the Action fails to explain WHY such feature is required or is beneficial, and as such the rationale fails to explain why one of ordinary skill in the art at the time the invention was made would see any reason to combine the references in an attempt to arrive at the claimed invention. It is noted that "Absent some articulated rationale for doing so, the Examiner's conclusory assertion is inadequate to support a conclusion of obviousness." See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007); see also *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967) ("The legal conclusion of obviousness must be

supported by facts. Where the legal conclusion is not supported by facts it cannot stand."). Further, even if the SDN is kind of advantage, none of the cited prior art references suggested that the primary reference could benefit from that advantage or was in need of that advantage. [See, e.g., Ex parte Saiki, No. 2000-0373, 2002 WL 32102452, at *3 (B.P.A.I. Jan. 17, 2002); Ex parte Burak, No. 2004-0823, 2004 WL 4981768, at *4 (Dec. 8, 2004)].

b. It is trivial, inherent, and self-evident that always adding a feature A to any device results in a device having a capability of feature A. Similarly, it is trivial, inherent, and self-evident that always adding the functionality of SDN to ANY system results in *"a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality"*. Hence, the rationale provides no link to the specific present application, as required in MPEP 2143 that clearly states that *"Any rationale employed must provide **a link between the factual findings and the legal conclusion of obviousness.**"* (Emphasis added), and *"... there must be "some articulated reasoning with some rational underpinning" to support the Examiner's findings and conclusion of obviousness"*. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 401, 418 (2007).

c. The Dolganow reference focuses on DPI of received packets, and acting upon the DPI analysis. However, the Dolganow reference is silent regarding any receiving any instruction of how to deal with received packet as known in SDN, and is in particular silent regarding routing any packet based on any received instruction or criteria. Adding such SDN functionalities inherently changes the scheme from DPI scheme,

thus such modifications would change the principle of operation of the system described in the Dolganow reference, see 2143.01:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.

In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

d. In particular, such modification of the router or switch described in the Dolganow reference requires massive change of the device, to include means for receiving instruction via an additional port, storing these instructions and criteria, applying dedicated SDN software (such as OpenFlow) requiring massive hardware, processing power and software, and forwarding packets based on this criteria. Such modifications fundamentally and inherently change the conventional routing / switching functionalities described in the Dolganow reference, and would require a substantial reconstruction and redesign of the elements shown in the Dolganow reference as well as a change in the basic principles under which the Dolganow reference construction was designed to operate. (In re Ratti, 270 F.2d 810, 813 (CCPA 1959)): "*a change in the basic principles*" refers to change that is fundamental in scope so as to relate to scientific or technical principles under which the invention is designed to operate.". Further, such changes would render the Dolganow reference inoperable for its intended purpose since it could only operate in an SDN supported network.

Regarding claim 20.

a. Single vs. multiple networks. Claim 20 clearly recites a single packet network. In contrast, the Dolganow reference expressly teaches two different networks, namely 120 and 140, connected via the node 130a. Hence the

b. Missing limitations. Claim 20 explicitly recites the limitation of: *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*. This limitation is not addressed by the Action. A prima facie case for obviousness *"requires a suggestion of all limitations in a claim,"* CFMT, Inc. v. Yieldup Int'l Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003). It is noted that the Dolganow reference fails to disclose any controller in general or any *"an instruction and a packet-applicable criterion"*, and in particular fails to disclose the recited *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*. Further, claim 20 explicitly recites the limitation of: *"... receiving, by the network node from the controller, the instruction and the criterion"*. The Action relies upon paragraphs 12, 30, and 81 of the Dolganow reference. HOWEVER, the Dolganow reference in general, and the cited paragraphs in particular, ONLY described receiving packets as part of the regular traffic to be analyzed, and are silent regarding any receiving from a controller in general, and receiving of *'the instruction and the criterion'* in particular.

Section 10 of the Action seems to state that controller is inherent. First, such statement is improper since *"The mere 'Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is*

not sufficient." In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999) (citations omitted). Further, *"To rely upon a theory of inherency, there must be "a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art."* Ex-parte Levy, 17 USPQ2d 1461, 1464 (BPAI 1990).

Second, even if such controller is *arguendo* available, this does NOT teach the recited steps of sending and receiving. However, in order to further differentiate over the prior art claim 20 is amended to recite that the controller is external to the network node, which is NOT the case in the Dolganow reference.

Regarding claims 21-26, 28-30, 36, 44, 49-56, 59, 67, 72-73.

On section 11 of the Action, it is stated that *"Then claim 20 is not allowable over the cited prior art of record. **Therefore, its dependent claim directly or indirectly are also not allowable** based on at least for the reasons provided above."* (Emphasis added).

First, it is noted that this statement is improper, since non-patentable independent claim **DOES NOT render its dependent claims as not-allowable.**

Second, the MPEP requires a full response and patentability analysis for EACH claim - MPEP 2103(C) states that: *"USPTO personnel should begin claim analysis by identifying and evaluating each claim limitation ... USPTO personnel are to correlate each claim limitation to all portions of the disclosure that describe the claim limitation."*

Improper rationale.

The rationale for combining for ALL these claims is stated as "... to build a SDN application that provides all of the desired SDN functionality in a system in order to implement a new SDN functionality".

First, it is noted that the Dolganow reference is silent regarding any 'software defined networks (SDN)' or any SDN functionality. Second, this rationale amounts to nothing more than a conclusory statement, while it is the Office *prima facie* burden to provide a "satisfactory explanation" for the motivation finding that includes an express and "rational" connection with the evidence presented. Third, the fact that the SAME rationale is used provides no link to the present application, as required in MPEP 2143 that clearly states that "Any rationale employed must provide **a link between the factual findings and the legal conclusion of obviousness.**" (Emphasis added), and "... there must be "some articulated reasoning with some rational underpinning" to support the Examiner's findings and conclusion of obviousness". See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 401, 418 (2007).

The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
Registration No. 73,612

Tel: +972-9-7409241
Mobile: +972-54-4444577

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 15/126,288		Filing Date 09/15/2016		☐ To be Mailed		
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO										
APPLICATION AS FILED - PART I										
FOR		(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE (\$)		FEE (\$)				
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A	N/A						
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A	N/A						
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A	N/A						
TOTAL CLAIMS (37 CFR 1.16(j))		minus 20 =	*	x \$40 =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =	*	x \$210 =						
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL						
APPLICATION AS AMENDED - PART II										
AMENDMENT	05/07/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	* 31	Minus	** 31	= 0	x \$50 =		0		
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0	x \$230 =		0		
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE		0		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	*	Minus	**	=	x \$0 =				
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x \$0 =				
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE				
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.						LIE				
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".						/GAIL D WOOTEN/				
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".										
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

U.S. PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
U.S. PATENT APPLICATION PUBLICATIONS							Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
If you wish to add additional U.S. Published Application citation information please click the Add button.							Add	
FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							
If you wish to add additional Foreign Patent Document citation information please click the Add button.								Add
NON-PATENT LITERATURE DOCUMENTS								Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.						T ⁵

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

1	Minlan Yu et al, "Scalable flow-based networking with DIFANE", Proceedings of the ACM SIGCOMM 2010 Conference on Applications, Technologies, Architectures, and Protocols for Computer Communications, New Delhi, India, August 30-September 3, 2010, ACM, pages 351-362 XP058189957
If you wish to add additional non-patent literature document citation information please click the Add button Add	
EXAMINER SIGNATURE	
Examiner Signature	Date Considered
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2019-07-07
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	36510368
Application Number:	15126288
International Application Number:	
Confirmation Number:	9263
Title of Invention:	A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS
First Named Inventor/Applicant Name:	Yossi BARSHESET
Customer Number:	131926
Filer:	Yehuda Binder/Dorit Binder
Filer Authorized By:	Yehuda Binder
Attorney Docket Number:	ORCKIT-001-US
Receipt Date:	08-JUL-2019
Filing Date:	15-SEP-2016
Time Stamp:	04:45:23
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	IDS2.pdf	1035040	no	4
			6f721acc01a39c718a2fcc9ddd32dfd0e5f480b2		

Warnings:

Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
2	Non Patent Literature	Scalable-Flow-Based-Networking.pdf	1532657 cea68c956cfae7070c757aff0ecee3930d53ba84	no	12
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
Total Files Size (in bytes):			2567697		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	Yossi BARSHESHET	ORCKIT-001-US	9263
131926	7590	07/08/2019	EXAMINER	
May Patents Ltd. c/o Dorit Shem-Tov			VOLTAIRE, JEAN F	
P.O.B 7230				
Ramat-Gan, 5217102				
ISRAEL			ART UNIT	PAPER NUMBER
			2466	
			MAIL DATE	DELIVERY MODE
			07/08/2019	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Response to amendment

2. This is a Non-Final Office action in response to applicant's remarks/arguments filed on 05/07/2019.

3. Status of the claims:

- Claims 20 and 51 have been amended.
- Claims 20-73 are currently pending and have been examined.

Response to remarks/arguments

4. Applicant's remarks/arguments filed on 05/07/2019 with respect to the rejection of claims 20-73 have been fully considered but they are moot in view of the new ground(s) of rejection. Upon further search and consideration a new ground(s) of rejection is made in view of Huang et al. (US 20160219080 A1).

Please see the rejection below.

Claim Rejections - 35 USC § 103

5. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of

rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

6. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to

consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

9. Claims 20-73 is/are rejected under 35 U.S.C. 103 as being unpatentable over Dolganow et al. (US 2010/0208590 A1) in view of Huang et al. (US 20160219080 A1).

Regarding claim 20, Dolganow discloses a method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method comprising: sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion (**Dolganow, para. 30; DPI devices 134, 136 may include hardware, instructions encoded on a machine-readable medium, or a combination thereof, such that DPI devices 134, 136 may be configured to examine data packets sent to router/switch 132 to identify information associated with the packets**); receiving, by the network node from the controller, the instruction and the criterion (**Dolganow, para. 12, 30, 81; receiving all relevant information associated with the packets**); receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity (**Dolganow, para. 59: network element 130a, 130b may receive a number of packets belonging to an IP flow between a P2P client 110 and a P2P central entity 150**).

Dolganow does not appear to explicitly disclose checking, by the network node, if the packet satisfies the criterion; responsive to the packet not satisfying the criterion,

sending, by the network node over the packet network, the packet to the second entity;
and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity.

Huang from similar field of endeavor discloses checking, by the network node, if the packet satisfies the criterion **(Huang, Fig. 2, para. 52, 54: a traffic collection request is sent to an SDN controller via a network capacity control device according to a pre-set collection policy. The traffic collection request focuses on describing the application layer requirements, and the level of abstraction is relatively high)**; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity **(Huang, Fig. 2, para. 102: the traffic collection request is sent to the network controller via a network capacity control device according to the pre-set collection policy, wherein the traffic collection request is used for allowing the network controller to send the request for traffic collection to the one or more network devices to be analyzed and processed)**; responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity **(Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as checking, by the network node, if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 21 and 52, Dolganow as modified by Huang discloses the method according to claim 20, wherein the instruction is 'probe', 'mirror', or 'terminate' instruction, and upon receiving by the network node the 'terminate' instruction, the method further comprising blocking, by the network node, the packet from being sent to the second entity and to the controller **(Dolganow, para. 50: this transmission may be accomplished by mirroring (i.e., duplicating) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. Alternatively, this transmission may be accomplished by redirecting (i.e., rerouting) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. As another alternative, DPI A 134 may build and send a message including the required information to DPI B 136).**

Dolganow does not appear to disclose the packet is being sent to the controller.

Huang, from similar of endeavor, discloses the packet is being sent to the controller **(Huang, Fig. 1, 2, para. 36: the traffic collection request is sent to the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 22 and 53, Dolganow as modified by Huang discloses the method according to claim 20, wherein the instruction is a 'probe', a 'mirror', or a 'terminate' instruction, and upon receiving by the network node the 'mirror' instruction and responsive to the packet satisfying the criterion, the method further comprising sending the packet, by the network node, to the second entity and to the controller **(Dolganow, para. 50, 59: Alternatively, this transmission may be accomplished by redirecting (i.e., rerouting) the packets in the IP flow that contain the key from DPI A 134 to DPI B 136. As another alternative, DPI A 134 may build and send a message including the required information to DPI B 136).**

Dolganow does not appear to disclose the packet is being sent to the controller.

Huang, from similar of endeavor, discloses the packet is being sent to the controller **(Huang, Fig. 1, 2, para. 36: the traffic collection request is sent to the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 23 and 54, Dolganow as modified by Huang discloses the method according to claim 20, however, Huang further discloses wherein the instruction is 'probe' , 'mirror', or 'terminate' instruction, and upon receiving by the network node the 'probe' instruction and responsive to the packet satisfying the criterion, the method further comprising: sending the packet, by the network node, to the controller **(Huang, Fig. 1, 2, para. 36: the traffic collection request is sent to the SDN controller)**; responsive to receiving the packet, analyzing the packet, by the controller **(Huang, Fig. 2, para. 41: the received traffic data are analyzed and processed by the SDN controller)**; sending the packet, by the controller, to the network node **(Huang, Fig. 2, para. 102: the traffic collection request is sent to the network controller via a network capacity control device according to the pre-set collection policy, wherein the traffic collection request is used for allowing the network controller to send the request for traffic collection to the one or more network devices to be analyzed and processed)**; and responsive to receiving the packet, sending the packet, by the network node, to the second entity **(Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing**

and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 24, 25 and 55, Dolganow as modified by Huang discloses the method according to claim 20, further comprising responsive to the packet satisfying the criterion and to the instruction, sending the packet or a portion thereof, by the network node, to the controller (Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow

such as sending the packet to the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 26 and 56, Dolganow as modified by Huang discloses the method according to claim 24, however, Huang further comprising responsive to the packet satisfying the criterion and to the instruction, sending a portion of the packet, by the network node, to the controller **(Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet to the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 27 and 57, Dolganow as modified by Huang discloses the method according to claim 26, wherein the portion of the packet consists of multiple consecutive bytes, and wherein the instruction comprises identification of

the consecutive bytes in the packet (**Dolganow, para. 69: DPI B 136 performs deep packet inspection on the packets relating to the request to attempt to extract a key identifying the P2P content transmitted in the flow. For example, when the protocol is BitTorrent, DPI B 136 may perform deep packet inspection to determine whether an info_hash field is present in the packets of the flow).**

Regarding claim 28, Dolganow as modified by Huang discloses the method according to claim 24, however, Huang further comprising responsive to receiving the packet, analyzing the packet, by the controller (**Huang, Fig. 2, para. 41: the received traffic data are analyzed and processed by the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as analyzing the packet, by the controller as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claim 29, Dolganow as modified by Huang discloses the method according to claim 28, However, Huang further for use with an application server that communicates with the controller, wherein the analyzing comprising sending the packet, by the controller, to the application server, and analyzing the packet by the application server (**Huang, para. 98, 99: the network device can be an independent server, and can also be a server used for realizing a network controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet, by the controller, to the application server, and analyzing the packet by the application server as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claim 30, Dolganow as modified by Huang discloses the method according to claim 29, however, Huang wherein the analyzing further comprising sending the packet after analyzing by the application server to the controller, and sending the packet, after receiving from the controller by the network node, to the second entity **(Huang, para. 98, 99: the network device can be an independent server, and can also be a server used for realizing a network controller)**.

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as sending the packet, by the controller, to the application server, and analyzing the packet by the application server as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claim 31, Dolganow as modified by Huang discloses the method according to claim 28, wherein the analyzing comprises applying security or data analytic application (**Dolganow, Fig. 4A, para. 60: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows**).

Regarding claim 32, Dolganow as modified by Huang discloses the method according to claim 28, wherein the analyzing comprises applying security application that comprises firewall or intrusion detection functionality (**Dolganow, Fig. 4A, para. 60: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows**).

Regarding claim 33, Dolganow as modified by Huang discloses the method according to claim 28, wherein the analyzing comprises performing Deep Packet Inspection (DPI) or using a DPI engine on the packet (**Dolganow, para. 12: performing DPI to extract a key from one or more of the first plurality of packets**).

Regarding claim 34, Dolganow as modified by Huang discloses the method according to claim 28, wherein the packet comprises distinct header and payload fields, and wherein the analyzing comprises checking part of, or whole of, the payload field (**Dolganow, para. 52-54, 57: Key field 210 may indicate the value of a key used to**

uniquely identify a P2P content item. This field 210 may be populated when extracted from a request sent from P2P client 110 to P2P central entity 150, provided that the request includes the key).

Regarding claims 35 and 58, Dolganow as modified by Huang discloses the method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises one or more flag bits, and wherein the packet-applicable criterion is that one or more of the flag bits is set **(Dolganow, para. 34, 43: P2P central entity 150 may be a BitTorrent tracker configured to receive a request including an info_hash from P2P client 110 and respond with a list containing location information of P2P client peers 160 that maintain the requested P2P content).**

Regarding claims 36 and 59, Dolganow as modified by Huang discloses the method according to claim 35, wherein the packet is an Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof **Huang, para. 36: the traffic collection request contains some parameters for assigning contents to be collected, such as service flows from regular users, interconnection Internet Protocol (IP) flows between regular networks and traffics from regular ports. After the SDN controller receives the traffic collection request, the SDN controller parses and processes the same to determine one or more network devices which need the traffic collection request).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as the packet is an Transmission Control Protocol (TCP) packet, and wherein the one or more flag bits comprises comprise a SYN flag bit, an ACK flag bit, a FIN flag bit, a RST flag bit, or any combination thereof as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 37 and 60, Dolganow as modified by Huang discloses the method according to claim 20, wherein the packet comprises distinct header and payload fields, the header comprises at least the first and second entities addresses in the packet network, and wherein the packet-applicable criterion is that the first entity address, the second entity address, or both match a predetermined address or addresses **(Dolganow, para. 39, 55, 62: DPI A 134 may determine whether the source or destination address of the packets is the address of a system known to operate as a P2P central entity 150, such as a BitTorrent tracker. Suitable alternatives for determining whether the exchange is between a P2P client 110 and a P2P central entity 150 will be apparent to those of skill in the art).**

Regarding claims 38 and 61, Dolganow as modified by Huang discloses the method according to claim 37, wherein the addresses are Internet Protocol (IP) addresses **(Dolganow, para. 39, 55, 62: addresses are IP addresses).**

Regarding claims 39 and 62, Dolganow as modified by Huang discloses the method according to claim 20, wherein the packet is an Transmission Control Protocol (TCP) packet that comprises source and destination TCP ports, a TCP sequence number, and a TCP sequence mask fields, and wherein the packet-applicable criterion is that the source TCP port, the destination TCP port, the TCP sequence number, the TCP sequence mask, or any combination thereof, matches a predetermined value or values (**Dolganow, para. 39, 55, 62: It should be apparent that an IP flow may be any IP flow between P2P client 110 and P2P central entity 150 or P2P client 110 and a P2P client peer 160, as identifiable by IP 5-tuple information, which includes the source IP address, source port, destination IP address, destination port, and protocol of the IP flow. This IP flow may be further tunneled inside another networking layer, such as IP, Ethernet, ATM, and the like).**

Regarding claims 40 and 63, Dolganow as modified by Huang discloses the method according to claim 20, wherein the packet network comprises a Wide Area Network (WAN), Local Area Network (LAN), the Internet, Metropolitan Area Network (MAN), Internet Service Provider (ISP) backbone, datacenter network, or inter-datacenter network (**Dolganow, Figs 1, 2, para. 28: Network element 130a may be an entity containing components configured to receive, process, and forward packets belonging to an IP flow received from packet-switched network 120. As an example, network element 130a may be owned and/or operated by an Internet Service Provider (ISP) providing services to P2P client 110. Network element 130a**

may include a router/switch 132, DPI A 134, DPI B 136, and key storage module 138).

Regarding claims 41 and 64, Dolganow as modified by Huang discloses the (New) The method according to claim 20, wherein the first entity is a server device and the second entity is a client device, or wherein the first entity is a client device and the second entity is a server device **(Dolganow, Fig. 1: entity 150 is a central entity (such as a server) and entity 160 is a client device).**

Regarding claims 42 and 65, Dolganow as modified by Huang discloses the method according to claim 41, wherein the server device comprises a web server, and wherein the client device comprises a smartphone, a tablet computer, a personal computer, a laptop computer, or a wearable computing device **(Dolganow, para. 34: P2P central entity 150 may store a database of information maintained within a particular P2P network, such that a user may search P2P central entity 150 to determine the location of desired content based on the file key).**

Regarding claims 43 and 66, Dolganow as modified by Huang discloses the method according to claim 41, wherein the communication between the network node and the controller is based on, or uses, a standard protocol **(Dolganow, Fig. 2, para. 18: the OpenFlow communications protocol, separate the data plane and the control plane, with the data plane remaining on the networking device and the**

control plane (containing the routing protocol and forwarding logic) moved to a controller platform typically running on an IHS coupled to the networking device).

Regarding claims 44 and 67, Dolganow as modified by Huang discloses the method according to claim 43, Huang further discloses wherein the standard protocol is according to, based on, or compatible with, an OpenFlow protocol version 1.3.3 or 1.4.0 (Huang, para. 36: the traffic collection request is sent to the SDN controller according to the pre-set collection policy. The traffic collection request contains some parameters for assigning contents to be collected, such as service flows from regular users, interconnection Internet Protocol (IP) flows between regular networks and traffics from regular ports. After the SDN controller receives the traffic collection request, the SDN controller parses and processes the same to determine one or more network devices which need the traffic collection request).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as the standard protocol is according to, based on, or compatible with, an OpenFlow protocol as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 45 and 68, Dolganow as modified by Huang discloses the method according to claim 44, wherein the instruction comprises a Type-Length-Value (TLV) structure (Dolganow, para. 53: Key field 210 may indicate the value of a key

used to uniquely identify a P2P content item. This field 210 may be populated when extracted from a request sent from P2P client 110 to P2P central entity 150, provided that the request includes the key).

Regarding claims 46 and 69, Dolganow as modified by Huang discloses the method according to claim 20, wherein the network node comprises a router, a switch, or a bridge (**Dolganow, Fig. 1, para. 25, 27: network element 130a may include a router, a switch, or a bridge).**

Regarding claims 47 and 70, Dolganow as modified by Huang discloses the method according to claim 20, wherein the packet network is an Internet Protocol (IP) network, and the packet is an IP packet (**Dolganow, para. 60, 62: DPI A 134 identifies an application protocol associated with the IP flow using one or more packets belonging to the IP flow or any other related information, such as packets belonging to other flows).**

Regarding claims 48 and 71, Dolganow as modified by Huang discloses the method according to claim 47, wherein the packet network is an Transmission Control Protocol (TCP) network, and the packet is an TCP packet (**Dolganow, para. 39, 55, 62: It should be apparent that an IP flow may be any IP flow between P2P client 110 and P2P central entity 150 or P2P client 110 and a P2P client peer 160, as identifiable by IP 5-tuple information, which includes the source IP address, source port, destination IP address, destination port, and protocol of the IP flow.**

This IP flow may be further tunneled inside another networking layer, such as IP, Ethernet, ATM, and the like).

Regarding claims 49 and 72, Dolganow as modified by Huang discloses the method according to claim 20, further comprising: receiving, by the network node from the first entity over the packet network, one or more additional packets **(Dolganow, para. 12: a network element may receive a first and second plurality of packets transmitted between a peer-to-peer (P2P) client and a P2P central entity).**

Dolganow does not appear to explicitly disclose checking, by the network node, if any one of the one or more additional packets satisfies the criterion; responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity; and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction.

Huang from similar field of endeavor discloses checking, by the network node, if any one of the one or more additional packets satisfies the criterion **(Huang, Fig. 2, para. 52, 54: a traffic collection request is sent to an SDN controller via a network capacity control device according to a pre-set collection policy. The traffic collection request focuses on describing the application layer requirements, and the level of abstraction is relatively high);** responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity **(Huang, Fig. 2, para. 102: the traffic collection request is sent to the network controller via a network capacity control device**

according to the pre-set collection policy, wherein the traffic collection request is used for allowing the network controller to send the request for traffic collection to the one or more network devices to be analyzed and processed); and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction **(Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as checking, by the network node, if any one of the one or more additional packets satisfies the criterion; responsive to an additional packet not satisfying the criterion, sending, by the network node over the packet network, the additional packet to the second entity; and responsive to the additional packet satisfying the criterion, sending the additional packet, by the network node over the packet network, in response to the instruction as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claims 50 and 73, Dolganow as modified by Huang discloses the method according to claim 20, Huang further discloses wherein the packet network is a

Software Defined Network (SDN), the packet is routed as part of a data plane and the network node communication with the controller serves as a control plane (**Huang, para. 43: each of the network control policies is sent to the SDN controller. After the SDN controller receives the network control policies, parsing and processing are performed to determine one or more network devices which need the network control policies. Each of the network control policies is converted into an instruction capable of being transmitted via the southbound interface of the SDN controller, and the converted network control policy is further sent to the corresponding network device via the southbound interface of the SDN controller).**

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as the packet network is a Software Defined Network (SDN), the packet is routed as part of a data plane and the network node communication with the controller serves as a control plane as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Regarding claim 51, Dolganow discloses a method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method by the network node comprising: receiving, from the controller, the instruction and the criterion (**Dolganow, para. 30; DPI devices 134, 136 may include hardware,**

instructions encoded on a machine-readable medium, or a combination thereof, such that DPI devices 134, 136 may be configured to examine data packets sent to router/switch 132 to identify information associated with the packets); receiving, from the first entity over the packet network, a packet addressed to the second entity **(Dolganow, para. 59; network element 130a, 130b may receive a number of packets belonging to an IP flow between a P2P client 110 and a P2P central entity 150).**

Dolganow does not appear to explicitly disclose checking if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet over the packet network, to an entity that is included in the instruction and is other than the second entity.

Huang from similar field of endeavor discloses checking, by the network node, if the packet satisfies the criterion **(Huang, Fig. 2, para. 52, 54: a traffic collection request is sent to an SDN controller via a network capacity control device according to a pre-set collection policy. The traffic collection request focuses on describing the application layer requirements, and the level of abstraction is relatively high)**; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity **(Huang, Fig. 2, para. 102: the traffic collection request is sent to the network controller via a network capacity control device according to the pre-set collection policy, wherein the traffic collection request is used for allowing the network controller to send the request for traffic collection to the one or more network devices to be**

analyzed and processed); responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity (**Huang, Fig. 2, para. 54, 62, 69: after the network capacity control device receives the traffic collection request, parsing and processing are performed to form a traffic collection request which can be recognized by the SDN controller, and the traffic collection request which is parsed and processed is transmitted to the SDN controller via a northbound interface of the SDN controller**).

Therefore, it would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the teaching of Dolganow with the teaching of Huang by using the above features into the system of Dolganow such as checking, by the network node, if the packet satisfies the criterion; responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity as taught by Huang. The motivation for doing so would have been to realize data collection and transmission of a control policy for one end-to-multiple ends.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN F VOLTAIRE whose telephone number is (571)272-3953. The examiner can normally be reached on M-F 9:00-6:45 PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FARUK HAMZA can be reached on (571)272-7969. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEAN F VOLTAIRE/
Examiner, Art Unit 2466
/JAE Y LEE/
Primary Examiner, Art Unit 2466

Notice of References Cited	Application/Control No. 15/126,288		Applicant(s)/Patent Under Reexamination BARSHESHET et al.	
	Examiner JEAN F VOLTAIRE		Art Unit 2466	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100208590-A1	08-2010	Dolganow; Andrew	H04L43/026	370/235
*	B	US-20160219080-A1	07-2016	Huang; Sunliang	H04L41/0893	1/1
*	C	US-20150124812-A1	05-2015	Agarwal; Kanak B.	H04L45/24	370/392
*	D	US-20160020998-A1	01-2016	BIFULCO; Roberto	H04L45/64	370/235
*	E	US-20160197831-A1	07-2016	DE FOY; Xavier	H04L45/7453	370/392
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20190527

<i>Search Notes</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CPC - Searched*		
Symbol	Date	Examiner
H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161	08/29/2018	JV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
370	389	08/29/2018	JV

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Inventorship search for double patenting issue	08/29/2018	JV
Text search in East	08/29/2018	JV
Text search in 3gpp.org, ieee.org, google.com for NPL publication	08/29/2018	JV
Consulted with primary examiner Candal Elpenord	08/24/2018	JV
Update text search	03/27/2019	JV
Consulted with Jae Y LEE	03/28/2019	JV
Update text search	05/26/2019	JV

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466	
--	--

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	07/21/2018	03/26/2019	05/28/2019						
	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	✓	✓	✓						
	29	✓	✓	✓						
	30	✓	✓	✓						
	31	✓	✓	✓						
	32	✓	✓	✓						
	33	✓	✓	✓						
	34	✓	✓	✓						
	35	✓	✓	✓						
	36	✓	✓	✓						
	37	✓	✓	✓						
	38	✓	✓	✓						
	39	✓	✓	✓						
	40	✓	✓	✓						
	41	✓	✓	✓						
	42	✓	✓	✓						

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CLAIM		DATE								
Final	Original	07/21/2018	03/26/2019	05/28/2019						
	43	✓	✓	✓						
	44	✓	✓	✓						
	45	✓	✓	✓						
	46	✓	✓	✓						
	47	✓	✓	✓						
	48	✓	✓	✓						
	49	✓	✓	✓						
	50	✓	✓	✓						
	51	✓	✓	✓						
	52	✓	✓	✓						
	53	✓	✓	✓						
	54	✓	✓	✓						
	55	✓	✓	✓						
	56	✓	✓	✓						
	57	✓	✓	✓						
	58	✓	✓	✓						
	59	✓	✓	✓						
	60	✓	✓	✓						
	61	✓	✓	✓						
	62	✓	✓	✓						
	63	✓	✓	✓						
	64	✓	✓	✓						
	65	✓	✓	✓						
	66	✓	✓	✓						
	67	✓	✓	✓						
	68	✓	✓	✓						
	69	✓	✓	✓						
	70	✓	✓	✓						
	71	✓	✓	✓						
	72	✓	✓	✓						
	73	✓	✓	✓						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2104	"20170099196" "20020009053" "7417948" "20080263424" "20150117313" "20120020301" "9112807" "9391912" "20140181282" "8031593" "9178661" "20170171085" "6965666" "20090067399" "20180102976" "20130315237" "9871734" "20050232222" "6944150" "9503365" "7471653" "20040090923" "7242668" "10165492" "20160036673" "20170104692" "20150305006" "10027559" "20180109565" "9479506" "8224371" "20130121298" "20180262924" "20060153204" "9220110" "9832092" "20060190612" "8045515" "20140194068" "9853903" "9584387" "20070058545" "9277538" "7492728" "20130100797" "9661514" "10193941" "9112729" "20160127223" "8036107" "20170331750" "20080052387" "7055174" "20150195185" "20110238985" "20110116405" "8913596" "10069736" "20080049769" "20170317933" "9872185" "20080049624" "20150089048" "20150254303" "20190089587" "10095878" "20150085655" "20080049776" "20100085887" "8670313" "20140297847" "20120230214" "20170364702" "20080049775" "8880115" "20140050106" "8743703" "20150207724" "20130322265" "20140064086" "8565805" "9374281" "8687614" "20140071977" "9667556" "20080049619" "20190037383" "20080052394" "9842135" "20190036888" "20190095478" "20140043999" "20190018975" "8520603" "20130152187" "20120127881" "20140064100" "10298476" "9485185" "20080049630" "20080049628" "20160080272" "8223654" "20150289159" "20120230328" "9014204" "20130135993" "20130033984" "20080049746" "20080049615" "7684332" "20160134502" "20110289578" "20180084475" "20140321273" "20080049649" "20080052401" "9479341" "20110317580" "20080052393" "8358580" "20120269071" "8619596"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:26

		"20150127783" "9253661" "20110032821" "20080049777" "20150207677" "20080049748" "20120314573" "8102770" "9602265" "9241277" "9100285" "20130294243" "20170366395" "20080052206" "20180365040" "8194555" "8677489" "20150304209" "9042370" "20120236750" "8015294" "20150295998" "20080049637" "20150110097" "8576722" "7852767" "20020152315" "20150373061" "20120257617" "9054986" "8619820" "8307065" "20130322249" "20180097853" "20080049745" "20170339217" "6614784" "8107366" "20160057062" "20080002677" "20120236729" "8064391" "20150138955" "20170324652" "8811160" "20130198805" "9979595" "20150149631" "8213366" "20160380878" "20120321052" "20120127882" "20080002676" "9240906" "20080049747" "20080049640" "7940735" "20080317032" "20080049632" "20080049650" "8948036" "20140226485" "20030169688" "10002011" "7808918" "20080049626" "9832090" "9621361" "20060018318" "20180248788" "20160043940" "7089027" "20150312283" "20130322432" "9794855" "20190090172" "20120201139" "20140043977" "20120327816" "20080049753" "9225609" "20150350048" "20180048549" "9225646" "8577363" "20080002716" "20080049641" "8374090" "9118717" "10084642"				
L3	843	"6944150" "9503365" "7471653" "20040090923" "7242668" "10165492" "20160036673" "20170104692" "20150305006" "10027559" "20180109565" "9479506" "8224371" "20130121298" "20180262924" "20060153204" "9220110" "9832092" "20060190612" "8045515" "20140194068" "9853903" "9584387" "20070058545" "9277538" "7492728" "20130100797" "9661514" "10193941" "9112729" "20160127223" "8036107" "20170331750" "20080052387" "7055174" "20150195185" "20110238985" "20110116405" "8913596" "10069736" "20080049769" "20170317933" "9872185" "20080049624" "20150089048" "20150254303" "20190089587" "10095878" "20150085655" "20080049776" "20100085887" "8670313" "20140297847" "20120230214" "20170364702" "20080049775" "8880115"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:27

		"20140050106" "8743703" "20150207724" "20130322265" "20140064086" "8565805" "9374281" "8687614" "20140071977" "9667556" "20080049619" "20190037383" "20080052394" "9842135" "20190036888" "20190095478" "20140043999"				
L4	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:29
L5	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:30
L6	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:31
L7	4716	(SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:01
L8	1299	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
L9	497	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
L10	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:03
L11	837	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	OFF	2019/05/28 13:04

			EPO; JPO; DERWENT; IBM_TDB			
L12	31	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/05/28 13:05
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:04
S7	3	"20130329734"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:05
S8	3	"20100208590"	US-PGPUB; USPAT;	OR	OFF	2018/08/14 20:07

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:12

		"20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637" "20160113006" "8358580" "9602265" "8520603" "20180077229" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677" "20120236750" "9240906" "8576722" "9621361" "20080049745" "20080049747" "9473985" "20170201979" "20120127882" "20170142165" "8787303" "9042370" "8619596" "20120201139" "20080002676" "7808918" "20150312283" "9231820" "20130322432" "8307065" "20080002716" "9054986" "20140043977" "8619820" "9241277" "20120330804" "20160249248" "20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:13

		"20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14: 20:14

		"9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"				
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18

EAST Search History

S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/08/14 20:21

			DERWENT; IBM_TDB			
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:22
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S40	91	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/24 11:27

		polic\$3))	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S49	39979	(H04L43/026 H04L12/6418 H04L43/028	US-PGPUB;	OR	OFF	2018/08/27

		H04L49/70 H04L69/161).CPC.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:49
S55	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S56	1	"20170099196"	DERWENT	OR	OFF	2019/03/27 16:32
S57	1	"20100208590"	DERWENT	OR	OFF	2019/03/27 16:33
S58	1	"20140052836"	DERWENT	OR	OFF	2019/03/27 16:33
S59	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 16:59
S60	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2019/03/27 17:04

			IBM_TDB			
S61	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S62	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S63	4	S62 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S64	1524	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"				
S65	370	"20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S66	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S67	104	S66 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S68	1264	(OpenFlow near5 (control\$4))	US-PGPUB;	OR	OFF	2019/03/27

		same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			22:43
S69	478	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S70	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S71	17590	370/389.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S72	1	"15497119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 10:50
S73	2	"15769777"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 13:55
S74	4	370/389.ccls. and DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
S75	776	DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
S78	815	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	OFF	2019/04/12 21:25

			IBM_TDB			
S79	249	DPI same (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:27
S80	460	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S81	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S82	403	"7852767" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20080049628" "20120230328" "20120314573" "20030108030" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637" "20160113006" "8358580" "9602265" "8520603" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:30
S83	73	"9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:31

5/ 28/ 2019 1:06:07 PM

C:\Users\jvoltage\Documents\EAST\Workspaces\15126288.wsp

Discover

Pat & Apps

responsive to the packet s...

+ 0 mods

0 filters

Visuals

Query

Results

0 Selected

Relevance

None

None

1 - 50

14,692,437 results

Top 1500 results

- A method and system for deep packet inspection in software defined networks**

A method for deep packet inspection (DPI) in a software defined network (SDN). The method includes configuring a plurality of network nodes operable in the SDN with at least one probe instruction; receiving from a network node a first packet of a flow, the first packet matches the at least one probe...

CURRENT ASSIGNEES: ORCKIT CORRIGENT LTD [+1]
US20170093196 | US APPLICATIONS | 06-APR-2017
- Controlled data network error recovery**

A method, a system and network nodes using indication of possible duplicates (IPD) of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was...

CURRENT ASSIGNEES: MICROSOFT TECH LICENSING LLC
US20020029053 | US APPLICATIONS | 24-JAN-2002
- Controlled data network error recovery**

A method, a system and network nodes using indication of possible duplicates (IPD) of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was...

CURRENT ASSIGNEES: MICROSOFT TECH LICENSING LLC
US7417948 | US PATENTS | 26-AUG-2008
- Controlled data network error recovery**

A method, a system and network nodes use an indication of possible duplicates of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was sent...

CURRENT ASSIGNEES: MICROSOFT TECH LICENSING LLC
US20080263424 | US APPLICATIONS | 23-OCT-2008
- Supervised data network fault recovery**

A method, a system and network nodes use an indication of possible duplicates of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was sent...

CURRENT ASSIGNEES: NOKIA CORP
FI135228 | FINLAND PATENTS | 15-JUN-2004
- Selective Bicastng**

A method including receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA TECH OY
US20150117313 | US APPLICATIONS | 30-APR-2015
- Controlled data network error recovery**

A method, a system and network nodes use an indication of possible duplicates of units, so that these units can...

Relevance [VIEW](#)

Publication Date [VIEW](#)

Cur Assignee by Relevance [VIEW](#)

- ORCKIT CORRIGENT LTD (1)
- MICROSOFT TECH LICENSING... (40)
- NOKIA CORP (34)
- NOKIA TECH OY (31)
- ALCATEL LUCENT (17)
- NOKIA NETWORKS INC (3)
- NOKIA SOLUTIONS & NET... (17)
- ALCATEL LUCENT (17)

Result #1

PREV NEXT

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	370/\$.ccls. AND mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/03 22:43
L2	13	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/03 22:44
L3	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/03 22:44
L4	63	370/\$.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/03 22:44
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB;	ADJ	OFF	2018/08/14

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			20:00
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:04
S7	3	"20130329734"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:05
S8	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/14 20:12

"9112807" "20170171085" "9853903"	IBM_TDB
"20060153204" "20150289159"	
"9503365" "20040090923" "7242668"	
"8036107" "20130152187"	
"20130121298" "9220110" "8677489"	
"8577363" "20080049619"	
"20020196789" "20130198805"	
"20120142341" "20180167337"	
"6965666" "9277538" "10027559"	
"20160127223" "20170331750"	
"7852767" "20170104692" "6400681"	
"20150089048" "20150207724"	
"20140304776" "7917471"	
"20150085655" "7116661" "9894694"	
"20140194068" "20150305006"	
"20180167987" "20080052387"	
"20130100797" "20120201140"	
"20150295808" "20150207677"	
"9667556" "20150365879"	
"20150304209" "20140297847"	
"9485185" "20110116405" "9100285"	
"20160278140" "20170317933"	
"20170063660" "20080049624"	
"5282270" "20080049769"	
"20180091388" "9088581" "8780721"	
"20100085887" "20140064086"	
"9479506" "9661514" "20100054140"	
"9872185" "8743703" "20130322265"	
"9112729" "20110238985"	
"20080052401" "8670313"	
"20140050106" "20140043999"	
"20080052394" "20110289578"	
"20080049776" "20170257319"	
"20140071977" "20160134502"	
"20080049615" "9979595"	
"20120230214" "20150365846"	
"20160344611" "20080049628"	
"20120230328" "20120314573"	
"20030108030" "20080049746"	
"20080049777" "20120257617"	
"20140064100" "20160080272"	
"20160112896" "20070076653"	
"20080049630" "20130033984"	
"7933214" "20130003538" "7203190"	
"20120127881" "20080049748"	
"20140092723" "20110032821"	
"20130135993" "20080052393"	
"9596169" "20140321273" "8687614"	
"20080052206" "20090067399"	
"20080049649" "20170324674"	
"9479341" "20110317580"	
"20080049640" "20120236729"	
"20170310600" "9014204"	
"20130322249" "20080049753"	
"20160057062" "20160044095"	
"7684332" "20150295998"	
"20120082161" "20130294243"	
"20170339217" "8015294"	
"20150110097" "20080049775"	
"20120182864" "20140226485"	
"20080049632" "8194555" "8223654"	
"20120321052" "20080049637"	
"20160113006" "8358580" "9602265"	
"8520603" "20180077229"	

		"20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677" "20120236750" "9240906" "8576722" "9621361" "20080049745" "20080049747" "9473985" "20170201979" "20120127882" "20170142165" "8787303" "9042370" "8619596" "20120201139" "20080002676" "7808918" "20150312283" "9231820" "20130322432" "8307065" "20080002716" "9054986" "20140043977" "8619820" "9241277" "20120330804" "20160249248" "20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:13

		"20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"				
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15

		"20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797"				
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/14 20:20

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB;	ADJ	OFF	2018/08/24

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:22
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S40	91	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:27
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/27 07:46

			IBM_TDB			
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S49	39979	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2018/08/27 07:49

			EPO; JPO; DERWENT; IBM_TDB			
S55	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S56	1	"20170099196"	DERWENT	OR	OFF	2019/03/27 16:32
S57	1	"20100208590"	DERWENT	OR	OFF	2019/03/27 16:33
S58	1	"20140052836"	DERWENT	OR	OFF	2019/03/27 16:33
S59	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 16:59
S60	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 17:04
S61	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S62	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S63	4	S62 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S64	1524	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"				
S65	370	"20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2019/03/27 22:42

		"20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"	DERWENT; IBM_TDB			
S66	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S67	104	S66 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S68	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S69	478	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S70	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S71	17590	370/389.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S72	1	"15497119"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2019/03/28 10:50

			EPO; JPO; DERWENT; IBM_TDB			
S73	2	"15769777"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 13:55
S74	4	370/389.ccls. and DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
S75	776	DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
S78	815	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/04/12 21:25
S79	249	DPI same (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:27
S80	460	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S81	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S82	403	"7852767" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20080049628" "20120230328" "20120314573" "20030108030" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:30

		"20080049637" "20160113006" "8358580" "9602265" "8520603" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677"				
S83	73	"9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:31
S84	2104	"20170099196" "20020009053" "7417948" "20080263424" "20150117313" "20120020301" "9112807" "9391912" "20140181282" "8031593" "9178661" "20170171085" "6965666" "20090067399" "20180102976" "20130315237" "9871734" "20050232222" "6944150" "9503365" "7471653" "20040090923" "7242668" "10165492" "20160036673" "20170104692" "20150305006" "10027559" "20180109565" "9479506" "8224371" "20130121298" "20180262924" "20060153204" "9220110" "9832092" "20060190612" "8045515" "20140194068" "9853903" "9584387" "20070058545" "9277538" "7492728" "20130100797" "9661514" "10193941" "9112729" "20160127223" "8036107" "20170331750" "20080052387" "7055174" "20150195185" "20110238985" "20110116405" "8913596" "10069736" "20080049769" "20170317933" "9872185" "20080049624" "20150089048" "20150254303" "20190089587" "10095878" "20150085655" "20080049776" "20100085887" "8670313" "20140297847" "20120230214" "20170364702" "20080049775" "8880115" "20140050106" "8743703" "20150207724" "20130322265" "20140064086" "8565805" "9374281" "8687614" "20140071977" "9667556" "20080049619" "20190037383" "20080052394" "9842135" "20190036888" "20190095478" "20140043999" "20190018975" "8520603" "20130152187" "20120127881" "20140064100" "10298476" "9485185" "20080049630" "20080049628" "20160080272" "8223654" "20150289159" "20120230328" "9014204" "20130135993" "20130033984" "20080049746" "20080049615" "7684332" "20160134502" "20110289578" "20180084475" "20140321273" "20080049649" "20080052401" "9479341" "20110317580" "20080052393"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:26

		"8358580" "20120269071" "8619596" "20150127783" "9253661" "20110032821" "20080049777" "20150207677" "20080049748" "20120314573" "8102770" "9602265" "9241277" "9100285" "20130294243" "20170366395" "20080052206" "20180365040" "8194555" "8677489" "20150304209" "9042370" "20120236750" "8015294" "20150295998" "20080049637" "20150110097" "8576722" "7852767" "20020152315" "20150373061" "20120257617" "9054986" "8619820" "8307065" "20130322249" "20180097853" "20080049745" "20170339217" "6614784" "8107366" "20160057062" "20080002677" "20120236729" "8064391" "20150138955" "20170324652" "8811160" "20130198805" "9979595" "20150149631" "8213366" "20160380878" "20120321052" "20120127882" "20080002676" "9240906" "20080049747" "20080049640" "7940735" "20080317032" "20080049632" "20080049650" "8948036" "20140226485" "20030169688" "10002011" "7808918" "20080049626" "9832090" "9621361" "20060018318" "20180248788" "20160043940" "7089027" "20150312283" "20130322432" "9794855" "20190090172" "20120201139" "20140043977" "20120327816" "20080049753" "9225609" "20150350048" "20180048549" "9225646" "8577363" "20080002716" "20080049641" "8374090" "9118717" "10084642"				
S85	843	"6944150" "9503365" "7471653" "20040090923" "7242668" "10165492" "20160036673" "20170104692" "20150305006" "10027559" "20180109565" "9479506" "8224371" "20130121298" "20180262924" "20060153204" "9220110" "9832092" "20060190612" "8045515" "20140194068" "9853903" "9584387" "20070058545" "9277538" "7492728" "20130100797" "9661514" "10193941" "9112729" "20160127223" "8036107" "20170331750" "20080052387" "7055174" "20150195185" "20110238985" "20110116405" "8913596" "10069736" "20080049769" "20170317933" "9872185" "20080049624" "20150089048" "20150254303" "20190089587" "10095878" "20150085655" "20080049776" "20100085887" "8670313" "20140297847" "20120230214" "20170364702"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:27

		"20080049775" "8880115" "20140050106" "8743703" "20150207724" "20130322265" "20140064086" "8565805" "9374281" "8687614" "20140071977" "9667556" "20080049619" "20190037383" "20080052394" "9842135" "20190036888" "20190095478" "20140043999"				
S86	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:29
S87	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:30
S88	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:31
S89	4716	(SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:01
S90	1299	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
S91	497	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
S92	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:03
S93	837	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR;	ADJ	OFF	2019/05/28 13:04

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S94	31	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/05/28 13:05
S95	1320	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 14:58
S96	32	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 15:04
S97	857	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 15:05
S98	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:05
S99	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:05
S100	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:06
S101	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:06
S102	10	"15126288"	US-PGPUB;	OR	OFF	2019/07/01

EAST Search History

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:25
S103	1	"20170099196"	DERWENT	OR	OFF	2019/07/01 15:26
S104	3	"20160219080"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:15
S105	13	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:23
S106	4	"20140094183"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:35
S107	5	"20170034834"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:36

7/ 3/ 2019 11:53:11 PM

C:\Users\jvoltaire\Documents\EAST\Workspaces\15126288.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: ORCKIT-001-US

In re Application of:	)	Confirmation No. 9263
	)	
Ronen Solomon	)	Art Unit: 2466
	)	
Appln. No.: 15/126,288	)	Examiner: Voltaire, Jean F.
	)	
Filed: September 15, 2016	)	Washington, D.C.
	)	
For: A METHOD AND SYSTEM FOR		
DEEP PACKET INSPECTION ...	)	October 2, 2019
	)	

AMENDMENT

Customer Service Window, Mail Stop Amendment
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, 401 Dulany Street
Alexandria, Virginia 22314

Sir:

This is in response to the examiner's action of July
8, 2019 ("Action").

Remarks / Arguments begin on page 2 of this paper.

REMARKS / ARGUMENTS

The Examiner's Action dated July 8, 2019, has been received, and its content carefully noted.

Office action, Section 9, pages 4-24

Claims 20-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolganow *et al.* (US 2010/0208590 - "Dolganow") in view of Huang *et al.* (US 2016/0219080 - "Huang").

a. Improper rationale.

1. Same rationale for different limitations

The Action relies on the Huang reference for the missing limitations of claims 1, 21, 52, 22, 53, 23, 54, 24, 25, 55, 26, 56, 28, 29, 30, 49, 72, 50, 73, and 51. In all these cases, the same rationale of "... to realize data collection and transmission of a control policy for one end-to-multiple ends." is stated. First, this rationale amounts to nothing more than a conclusory statement, while is the Office *prima facie* burden to provide a "satisfactory explanation" for the motivation finding that includes an express and "rational" connection with the evidence presented. Second, the missing limitations are different and distinct, and thus the SAME rationale is improper, since the SAME rationale provides no link to the present application, as required in MPEP 2143 that clearly states that "Any rationale employed must provide **a link between the factual findings and the legal conclusion of obviousness.**" (Emphasis added), and "... there must be "some articulated reasoning with some rational underpinning" to support the Examiner's findings and conclusion of obviousness". See KSR *Inti Co. v. Teleflex Inc.*, 550 U.S. 401,

418 (2007). Further, it is noted that "*Absent some articulated rationale for doing so, the Examiner's conclusory assertion is inadequate to support a conclusion of obviousness.*" See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); see also *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967) ("*The legal conclusion of obviousness must be supported by facts. Where the legal conclusion is not supported by facts it cannot stand.*").

2. Changing operation principle.

The rationale is stated as "... to realize data collection and transmission of a control policy for **one end-to-multiple ends.**" (Emphasis added). However, as implied by its title and described throughout the disclosure, the Dolganow reference is directed to 'peer-to-peer' communication, and NOT to any 'one end-to-multiple ends. As stated by the rationale. Modifying the Dolganow reference to support point-to-multipoint clearly changes its principle of operation, while MPEP 2143.01 states:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.

In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Further, such changes would render the Dolganow reference inoperable for its intended purpose since it could only operate in an SDN supported network.

3. Not required feature

Claims 21, 52, 22, 53, 23, 54, 24, 25, 55, 26, 56, 28, 29, 30, 49, 72, 50, 73, and 51 are rejected under the

rationale of "... to realize data collection and transmission of a control policy for one end-to-multiple ends", which is the SAME rationale stated for claim 1. Since claim 1 is already admitted in the Action to provide this motivation, the added features in these claims are unneeded and redundant - Unneeded advantage: Where the secondary reference disclosed an advantage, but where none of the cited prior art references suggested that the primary reference could benefit from that advantage or was in need of that advantage. [See, e.g., Ex parte Saiki, No. 2000-0373, 2002 WL 32102452, at *3 (B.P.A.I. Jan. 17, 2002); Ex parte Burak, No. 2004-0823, 2004 WL 4981768, at *4 (Dec. 8, 2004)]. Redundant advantage - Where the secondary reference disclosed an advantage, and where the primary reference already possessed that advantage. See, e.g., Ex parte Anttila & Jung, No. 2010-006328, 2012 WL 4718520, at *3 (B.P.A.I. Sept. 27, 2012); Kastelewicz, 2009 WL 1719394, at *5-7; Ex parte Levine, No. 2010-001240, 2012 WL 4483329, at *3 (B.P.A.I. Sept. 25, 2012).

4. Unclear rationale

The rationale is stated as - "... to realize data collection and transmission of a control policy for one end-to-multiple ends". The Examiner's articulated reasoning namely, to is conclusory, as it is not clear how the stated limitations are relevant technically and logically to the stated rationale, See In re Nuvasive, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (noting that "'conclusory statements' alone are insufficient and, instead, the finding must be supported by a 'reasoned explanation'"') (quoting In re Lee, 277 F.3d 1338, 1342, 1345 (Fed. Cir. 2002)); see also Active Video Networks, Inc., v. Verizon Communications, Inc., 694 F.3d

1312, 1328 (Fed. Cir. 2012) (noting that "[t]he testimony is generic and bears no relation to any specific combination of prior art elements").

b. Combining the Dolganow and Huang references.

1. The Action contends that the Dolganow and Huang are combined being in a 'similar field of endeavor'. **The applicant respectfully request a clear definition of the 'field of endeavor' as required by the rules.** (MPEP 2141.01(a)(I) - '*The examiner must determine what is "analogous prior art" for the purpose of analyzing the obviousness of the subject matter at issue*').

2. Applicant submits that the Dolganow and Huang references are directed towards respectively different purposes and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Dolganow reference involves DPI, where packets are handled based on their content, while the Huang reference involves SDN, where packets are handled based on externally received instructions. For example, the Dolganow reference involves **OSI Layer 3** or above analysis, while the Huang reference involves local routing (**OSI Layer 2**) without any analysis of the packet content.

Hence, the two references are directed to different devices having different functionalities and differently handling traffic, and thus cannot be combined. It is respectfully submitted that it is simply not appropriate to select a secondary reference that happens to disclose, in isolation, a single feature, and conclude, without a proper

basis, that it would be obvious to add that feature to another device in a different field.

3. The Action is clearly improperly shifting its position to relying on the Huang reference, resulting in 'moving target rejections for [applicant] to traverse'. [See *In re Durance*, No. 2017-1486, 2018 (Fed. Cir. June 1, 2018)].

4. Further, it would not be appropriate to base this rejection on a combination of these references because the devices and networks described in the Dolganow and Huang references are each self-contained and independently operate effectively to solve the stated problem of DPI of traffic, and:

Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.

[*Kinetic Concepts v. Smith and Nephew*, 688 F.3d 1342, at 1369 (CAFC, 2012).] – See MPEP §2143.01.

5. It is further noted that MPEP §808.02(A) explicitly recites that **different classes** "... shows that each invention has attained recognition in the art as a **separate subject** for inventive effort, and also a **separate field** of search." (Emphasis added). Furthermore, there is no suggestion or motivation to combine:

*[W]hen art is directed to a **different purpose then a claimed invention**, an inventor would have less motivation or occasion to consider it.*

In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992).

The Dolganow reference is classified under U.S. Class 370/235 associated with "*MULTIPLEX COMMUNICATIONS - DATA FLOW CONGESTION PREVENTION OR CONTROL*", mainly focusing on regulating the amount of information transmitted through the network, while the Huang reference is classified under U.S. Class H04L 63/20 associated with "*Network architectures or network communication protocols for network security for managing network security; network security policies in general*" - relating mainly to the DPI for security purposes. Thus, the two reference are in different fields.

6. The Action fails to explain HOW the device described in the Dolganow reference is being modified to include the limitations taught by the Huang reference. The Action only states that the missing limitations are disclosed by the Huang reference and as such may be combined. A clear explanation is required according to the rules.

c. Non-consistent rejections.

Claim 20 recites communication between first and second entities. The rejection of claim 20 equates these entities to '*P2P client 110 and a P2P central entity 150*' (see at the bottom of page 4). However, in the rejection of claims 21, 52, 22, 53, 27, 57, 37, 60, 47, 70 and other claims, the entities are improperly equated to DPI A 134 and DPI B 136.

Regarding claim 20.

a. Single vs. multiple networks. Claim 20 clearly recites a single packet network. In contrast, the Dolganow reference expressly teaches two different networks, namely 120 and 140, connected via the node 130a.

b. Missing limitations. Claim 20 explicitly recites the limitation of: *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*. This limitation is not addressed by the Action. A prima facie case for obviousness *"requires a suggestion of all limitations in a claim,"* CFMT, Inc. v. Yieldup Int'l Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003). It is noted that the Dolganow reference fails to disclose any controller in general or any *"an instruction and a packet-applicable criterion"*, and in particular fails to disclose the recited *"... sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion"*. Further, claim 20 explicitly recites the limitation of: *"... receiving, by the network node from the controller, the instruction and the criterion"*. The Action relies upon paragraphs 12, 30, and 81 of the Dolganow reference. HOWEVER, the Dolganow reference in general, and the cited paragraphs in particular, ONLY described receiving packets as part of the regular traffic to be analyzed, and are silent regarding any receiving from a controller in general, and receiving of *'the instruction and the criterion'* in particular.

Section 10 of the Action seems to state that controller is inherent. First, such statement is improper since *"'The mere "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."* In re Robertson, 169 F.3d 743, 745 (Fed. Cir. 1999) (citations omitted). Further, *"To rely upon a theory of inherency, there must be "a basis in fact and/or technical reasoning to reasonably support the determination that the*

allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex-parte Levy, 17 USPQ2d 1461, 1464 (BPAI 1990).

Second, even if such controller is arguendo available, this does NOT teach the recited steps of sending and receiving. However, in order to further differentiate over the prior art claim 20 is amended to recite that the controller is external to the network node, which is NOT the case in the Dolganow reference.

c. In particular, such modification of the router or switch described in the Dolganow reference requires massive change of the device, to include means for receiving instruction via an additional port, storing these instructions and criteria, applying dedicated SDN software (such as OpenFlow) requiring massive hardware, processing power and software, and forwarding packets based on this criteria. Such modifications fundamentally and inherently change the conventional routing / switching functionalities described in the Dolganow reference, and would require a substantial reconstruction and redesign of the elements shown in the Dolganow reference as well as a change in the basic principles under which the Dolganow reference construction was designed to operate. (In re Ratti, 270 F.2d 810, 813 (CCPA 1959)): "*a change in the basic principles" refers to change that is fundamental in scope so as to relate to scientific or technical principles under which the invention is designed to operate.*". Further, such changes would render the Dolganow reference inoperable for its intended purpose since it could only operate in an SDN supported network.

The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
Registration No. 73,612

Tel: +972-9-7409241
Mobile: +972-54-4444577
e-mail: yehuda@maypatents.com

Electronic Acknowledgement Receipt	
EFS ID:	37339577
Application Number:	15126288
International Application Number:	
Confirmation Number:	9263
Title of Invention:	A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS
First Named Inventor/Applicant Name:	Yossi BARSHESET
Customer Number:	131926
Filer:	Yehuda Binder/Dorit Binder
Filer Authorized By:	Yehuda Binder
Attorney Docket Number:	ORCKIT-001-US
Receipt Date:	02-OCT-2019
Filing Date:	15-SEP-2016
Time Stamp:	07:23:36
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		7-2019-NFOA-Response.pdf	58160	yes	10
			e5a4fe136cece4deb126247afa44c43197e3 1cd2		

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Applicant Arguments/Remarks Made in an Amendment	2	10
Warnings:			
Information:			
Total Files Size (in bytes):		58160	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.			



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

131926 7590 01/07/2020
May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

EXAMINER

VOLTAIRE, JEAN F

ART UNIT

PAPER NUMBER

2466

DATE MAILED: 01/07/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	Yossi BARSHESHET	ORCKIT-001-US	9263

TITLE OF INVENTION: A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0.00	\$0.00	\$500	04/07/2020

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

131926 7590 01/07/2020
May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	Yossi BARSHESHET	ORCKIT-001-US	9263

TITLE OF INVENTION: A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0.00	\$0.00	\$500	04/07/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
VOLTAIRE, JEAN F	2466	370-389000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	Yossi BARSHESHET	ORCKIT-001-US	9263
131926 7590 01/07/2020 May Patents Ltd. c/o Dorit Shem-Tov P.O.B 7230 Ramat-Gan, 5217102 ISRAEL			EXAMINER VOLTAIRE, JEAN F	
			ART UNIT 2466	PAPER NUMBER
DATE MAILED: 01/07/2020				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation of the law.

Notice of Allowability	Application No. 15/126,288	Applicant(s) BARSHESHET et al.	
	Examiner JEAN F VOLTAIRE	Art Unit 2466	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's arguments filed on 10/02/2019.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 20-73. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☐ All b) ☐ Some *c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)	5. ☐ Examiner's Amendment/Comment
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material ____.	7. ☐ Other ____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.	

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466	/JAE Y LEE/ Primary Examiner, Art Unit 2466
--	--

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Allowable Subject Matter

2. Claims 20-73 are allowed.
3. The following is an examiner's statement of reasons for allowance: Claims 20-73 are allowed for the reasons as set forth in Applicant's amendment and remarks/arguments filed 10/02/2019.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN F VOLTAIRE whose telephone number is (571)272-3953. The examiner can normally be reached on M-F 9:00-6:45 PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an

interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FARUK HAMZA can be reached on (571)272-7969. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <https://ppair-my.uspto.gov/pair/PrivatePair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEAN F VOLTAIRE/
Examiner, Art Unit 2466
/JAE Y LEE/
Primary Examiner, Art Unit 2466

Notice of References Cited	Application/Control No. 15/126,288		Applicant(s)/Patent Under Reexamination BARSHESHET et al.	
	Examiner JEAN F VOLTAIRE		Art Unit 2466	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20100208590-A1	08-2010	Dolganow; Andrew	H04L43/026	370/235
*	B	US-20160219080-A1	07-2016	Huang; Sunliang	H04L63/20	1/1
*	C	US-20150124812-A1	05-2015	Agarwal; Kanak B.	H04L45/24	370/392
*	D	US-20160020998-A1	01-2016	BIFULCO; Roberto	H04L45/64	370/235
*	E	US-20160197831-A1	07-2016	DE FOY; Xavier	H04L45/7453	370/392
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20191223

<i>Search Notes</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CPC - Searched*		
Symbol	Date	Examiner
H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161	08/29/2018	JV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
370	389	08/29/2018	JV

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

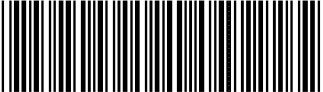
Search Notes		
Search Notes	Date	Examiner
Inventorship search for double patenting issue	08/29/2018	JV
Text search in East	08/29/2018	JV
Text search in 3gpp.org, ieee.org, google.com for NPL publication	08/29/2018	JV
Consulted with primary examiner Candal Elpenord	08/24/2018	JV
Update text search	03/27/2019	JV
Consulted with Jae Y LEE	03/28/2019	JV
Update text search	05/26/2019	JV
Update text search in East	12/23/2019	JV
Update text search in 3gpp.org, ieee.org, google.com for NPL publication	12/23/2019	JV

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466	
--	--

<i>Search Notes</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
	See East Interference Text Search Printout History	12/23/2019	JV

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466	
--	--

Issue Classification 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

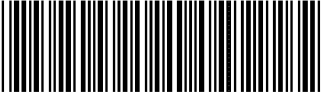
CPC						
Symbol					Type	Version
H04L	/	43	/	028	F	2013-01-01
H04L	/	12	/	6418	I	2013-01-01
H04L	/	43	/	026	I	2013-01-01
H04L	/	47	/	2483	I	2013-01-01
H04L	/	49	/	70	I	2013-01-01
H04L	/	69	/	161	I	2013-01-01

CPC Combination Sets					
Symbol		Type	Set	Ranking	Version
	/				

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466 (Assistant Examiner)	23 December 2019 (Date)	Total Claims Allowed: 54	
/JAE Y LEE/ Primary Examiner, Art Unit 2466 (Primary Examiner)	26 December 2019 (Date)	O.G. Print Claim(s) 20	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20191223

Issue Classification 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

INTERNATIONAL CLASSIFICATION			
CLAIMED			
H04L		12	26
NON-CLAIMED			

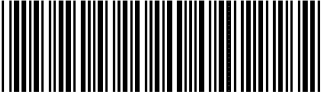
US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466 (Assistant Examiner)	23 December 2019 (Date)	Total Claims Allowed: 54	
/JAE Y LEE/ Primary Examiner, Art Unit 2466 (Primary Examiner)	26 December 2019 (Date)	O.G. Print Claim(s) 20	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20191223

Issue Classification 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
-	1	-	11	2	21	12	31	22	41	32	51	42	61	52	71
-	2	-	12	3	22	13	32	23	42	33	52	43	62	53	72
-	3	-	13	4	23	14	33	24	43	34	53	44	63	54	73
-	4	-	14	5	24	15	34	25	44	35	54	45	64		
-	5	-	15	6	25	16	35	26	45	36	55	46	65		
-	6	-	16	7	26	17	36	27	46	37	56	47	66		
-	7	-	17	8	27	18	37	28	47	38	57	48	67		
-	8	-	18	9	28	19	38	29	48	39	58	49	68		
-	9	-	19	10	29	20	39	30	49	40	59	50	69		
-	10	1	20	11	30	21	40	31	50	41	60	51	70		

/JEAN F VOLTAIRE/ Examiner, Art Unit 2466 (Assistant Examiner)	23 December 2019 (Date)	Total Claims Allowed: 54	
/JAE Y LEE/ Primary Examiner, Art Unit 2466 (Primary Examiner)	26 December 2019 (Date)	O.G. Print Claim(s) 20	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20191223

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	07/21/2018	03/26/2019	05/28/2019	12/23/2019					
-	1	-	-	-	-					
-	2	-	-	-	-					
-	3	-	-	-	-					
-	4	-	-	-	-					
-	5	-	-	-	-					
-	6	-	-	-	-					
-	7	-	-	-	-					
-	8	-	-	-	-					
-	9	-	-	-	-					
-	10	-	-	-	-					
-	11	-	-	-	-					
-	12	-	-	-	-					
-	13	-	-	-	-					
-	14	-	-	-	-					
-	15	-	-	-	-					
-	16	-	-	-	-					
-	17	-	-	-	-					
-	18	-	-	-	-					
-	19	-	-	-	-					
1	20	✓	✓	✓	=					
2	21	✓	✓	✓	=					
3	22	✓	✓	✓	=					
4	23	✓	✓	✓	=					
5	24	✓	✓	✓	=					
6	25	✓	✓	✓	=					
7	26	✓	✓	✓	=					
8	27	✓	✓	✓	=					
9	28	✓	✓	✓	=					
10	29	✓	✓	✓	=					
11	30	✓	✓	✓	=					
12	31	✓	✓	✓	=					
13	32	✓	✓	✓	=					
14	33	✓	✓	✓	=					
15	34	✓	✓	✓	=					
16	35	✓	✓	✓	=					
17	36	✓	✓	✓	=					
18	37	✓	✓	✓	=					
19	38	✓	✓	✓	=					
20	39	✓	✓	✓	=					
21	40	✓	✓	✓	=					
22	41	✓	✓	✓	=					
23	42	✓	✓	✓	=					

<i>Index of Claims</i> 	Application/Control No. 15/126,288	Applicant(s)/Patent Under Reexamination BARSHESHET et al.
	Examiner JEAN F VOLTAIRE	Art Unit 2466

CLAIM		DATE									
Final	Original	07/21/2018	03/26/2019	05/28/2019	12/23/2019						
24	43	✓	✓	✓	=						
25	44	✓	✓	✓	=						
26	45	✓	✓	✓	=						
27	46	✓	✓	✓	=						
28	47	✓	✓	✓	=						
29	48	✓	✓	✓	=						
30	49	✓	✓	✓	=						
31	50	✓	✓	✓	=						
32	51	✓	✓	✓	=						
33	52	✓	✓	✓	=						
34	53	✓	✓	✓	=						
35	54	✓	✓	✓	=						
36	55	✓	✓	✓	=						
37	56	✓	✓	✓	=						
38	57	✓	✓	✓	=						
39	58	✓	✓	✓	=						
40	59	✓	✓	✓	=						
41	60	✓	✓	✓	=						
42	61	✓	✓	✓	=						
43	62	✓	✓	✓	=						
44	63	✓	✓	✓	=						
45	64	✓	✓	✓	=						
46	65	✓	✓	✓	=						
47	66	✓	✓	✓	=						
48	67	✓	✓	✓	=						
49	68	✓	✓	✓	=						
50	69	✓	✓	✓	=						
51	70	✓	✓	✓	=						
52	71	✓	✓	✓	=						
53	72	✓	✓	✓	=						
54	73	✓	✓	✓	=						

Discover

PAT

A method for use with a p...

+ 0 mods

0 filters

STIC

Visuals

Query

Results

0 Selected

Relevance

None

None

6. Controlled data network error recovery

A method, a system and network nodes use an indication of possible duplicates of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was sent...

CURRENT ASSIGNEES: MICROSOFT TECH LICENSING LLC [+1]
US20120020301 | US APPLICATIONS | 26-JAN-2012

7. Selective Bicasting

A method including receiving a packet and determining whether a bicast indication associated with the packet indicates that the packet has been transmitted to two or more access points; and dropping the packet in dependence on at least one criterion.

CURRENT ASSIGNEES: NOKIA TECH OY
US20150117313 | US APPLICATIONS | 30-APR-2015

8. Controlled data network error recovery

A method, a system and network nodes using indication of possible duplicates (IPD) of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was...

CURRENT ASSIGNEES: NOKIA CORP
EP1147635B1 | EPO PATENTS | 12-NOV-2003

9. System and method for managing network information

A method for managing information in a network includes identifying a first network entity storing a requested object, receiving the object from the first network entity, and storing the object in a storage area based on a parameter. The storage area is coupled to a second network entity which...

CURRENT ASSIGNEES: ALCATEL LUCENT
US20140181282 | US APPLICATIONS | 28-JUN-2014

10. Prioritized handling of incoming packets by a network interface controller

A network interface controller includes a host interface, which is configured to be coupled to a host processor having a host memory. A network interface is configured to receive data packets from a network, each data packet including a header, which includes header fields, and a payload including...

CURRENT ASSIGNEES: MELLANOX TECH LTD
US20180102976 | US APPLICATIONS | 12-APR-2018

11. Controlled data network error recovery

A method, a system and network nodes use an indication of possible duplicates of units, so that these units can be handled differently than other units. The unit is indicated to be a possible duplicate to the entity to which it is resent because no response was received from the entity it was sent...

CURRENT ASSIGNEES: MICROSOFT TECH LICENSING LLC
US8031593 | US PATENTS | 04-OCT-2011

12. Prioritized Handling of Incoming Packets by a Network Interface Controller

A network interface controller includes a host interface, which is configured to be coupled to a host processor having a host memory. A network interface is configured to receive data packets from a network, each data packet including a header, which includes header fields, and a payload including...

Result #1

PREV

NEXT

Top 1500 results

Relevance VIEW

0 Results

602 Results

898 Results

0 Results

0 Results

Publication Date VIEW

First Cur Assignees by Relevance VIEW

- ORCKIT CORRIGENT LTD (1)
- ORCKIT IP LLC (3)
- MICROSOFT TECH LICENS... (30)
- NOKIA TECH OY (26)
- NOKIA CORP (49)
- ALCATEL LUCENT (23)
- MELLANOX TECH LTD (4)
- NOKIA NETWORKS INC (7)

More Visuals

EAST Search History**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	212	DPI same (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT	OR	OFF	2019/12/24 23:55
L4	6	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT	OR	OFF	2019/12/24 23:55
S129	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT	OR	OFF	2019/12/23 20:16
S130	6	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT	OR	OFF	2019/12/23 20:17
S131	38	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT	ADJ	OFF	2019/12/23 20:18
S132	14	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT	ADJ	OFF	2019/12/23 20:49
S133	11	different entit\$3 and ((deep packet inspection) or DPI) same ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT	ADJ	OFF	2019/12/23 20:53

12/ 24/ 2019 11:56:26 PM**C:\ Users\ jvoltaire\ Documents\ EAST\ Workspaces\ 15126288.wsp**

Receipt date: 07/08/2019

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)

Approved for use through 07/31/2016. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15126288
	Filing Date	2016-09-15
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	2466
	Examiner Name	VOLTAIRE, JEAN F
	Attorney Docket Number	ORCKIT-001-US

U.S.PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
U.S.PATENT APPLICATION PUBLICATIONS							Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
If you wish to add additional U.S. Published Application citation information please click the Add button.							Add	
FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							
If you wish to add additional Foreign Patent Document citation information please click the Add button.								Add
NON-PATENT LITERATURE DOCUMENTS							Remove	
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.						T ⁵

Receipt date: 07/08/2019

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15126288
Filing Date	2016-09-15
First Named Inventor	BARSHESHET, Yossi
Art Unit	2466
Examiner Name	VOLTAIRE, JEAN F
Attorney Docket Number	ORCKIT-001-US

1

Minlan Yu et al, "Scalable flow-based networking with DIFANE", Proceedings of the ACM SIGCOMM 2010 Conference on Applications, Technologies, Architectures, and Protocols for Computer Communications, New Delhi, India, August 30-September 3, 2010, ACM, pages 351-362 XP058189957

If you wish to add additional non-patent literature document citation information please click the Add button

Add

EXAMINER SIGNATURE

Examiner Signature	/JEAN F VOLTAIRE/	Date Considered	12/23/2019
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

Receipt date: 07/08/2019

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15126288
Filing Date	2016-09-15
First Named Inventor	BARSHESHET, Yossi
Art Unit	2466
Examiner Name	VOLTAIRE, JEAN F
Attorney Docket Number	ORCKIT-001-US

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2019-07-07
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

~~ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.F.V/~~

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11	different entit\$3 and ((deep packet inspection) or DPI) same ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/24 23:54
L2	236	DPI same (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/24 23:55
S1	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 19:58
S2	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 19:59
S3	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S4	91	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/14 20:00
S5	18764	(H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:02
S6	39906	(H04L43/026 H04L12/6418 H04L43/028	US-PGPUB;	OR	OFF	2018/08/14

		H04L49/70 H04L69/161).CPC.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			20:04
S7	3	"20130329734"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:05
S8	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S9	2	"20110264802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:07
S10	2	"20100212006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S11	37	"2672668"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:08
S12	1819	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:12

"20180167987"	"20080052387"
"20130100797"	"20120201140"
"20150295808"	"20150207677"
"9667556"	"20150365879"
"20150304209"	"20140297847"
"9485185"	"20110116405"
"20160278140"	"20170317933"
"20170063660"	"20080049624"
"5282270"	"20080049769"
"20180091388"	"9088581"
"20100085887"	"20140064086"
"9479506"	"9661514"
"9872185"	"8743703"
"9112729"	"20110238985"
"20080052401"	"8670313"
"20140050106"	"20140043999"
"20080052394"	"20110289578"
"20080049776"	"20170257319"
"20140071977"	"20160134502"
"20080049615"	"9979595"
"20120230214"	"20150365846"
"20160344611"	"20080049628"
"20120230328"	"20120314573"
"20030108030"	"20080049746"
"20080049777"	"20120257617"
"20140064100"	"20160080272"
"20160112896"	"20070076653"
"20080049630"	"20130033984"
"7933214"	"20130003538"
"20120127881"	"20080049748"
"20140092723"	"20110032821"
"20130135993"	"20080052393"
"9596169"	"20140321273"
"20080052206"	"20090067399"
"20080049649"	"20170324674"
"9479341"	"20110317580"
"20080049640"	"20120236729"
"20170310600"	"9014204"
"20130322249"	"20080049753"
"20160057062"	"20160044095"
"7684332"	"20150295998"
"20120082161"	"20130294243"
"20170339217"	"8015294"
"20150110097"	"20080049775"
"20120182864"	"20140226485"
"20080049632"	"8194555"
"20120321052"	"20080049637"
"20160113006"	"8358580"
"8520603"	"20180077229"
"20080049626"	"9253661"
"20150138955"	"20120327816"
"20160380878"	"20080002677"
"20120236750"	"9240906"
"9621361"	"20080049745"
"20080049747"	"9473985"
"20170201979"	"20120127882"
"20170142165"	"8787303"
"8619596"	"20120201139"
"20080002676"	"7808918"
"20150312283"	"9231820"
"20130322432"	"8307065"
"20080002716"	"9054986"
"20140043977"	"8619820"
"20120330804"	"20160249248"

		"20150373061" "8064391" "8948036"				
S13	1255	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:13
S14	1178	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993"				
S15	982	"20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14

		"20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"				
S16	808	"20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677" "9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:14
S18	740	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:15
S19	254	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:16

		"20130121298" "9220110" "8677489" "8577363"				
S20	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S21	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S22	2	"20180102976"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:18
S23	3	"20130315237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S24	3	"20080263424"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:19
S26	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S27	2	"20150350048"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S28	4	"20140181282"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:20
S29	2	"20170171085"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/14 20:21

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S30	3	"20060153204"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S31	2	"20150289159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:21
S32	6	"20040090923"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S33	5	"20130152187"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S34	6	"20130121298"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/14 20:22
S35	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:07
S36	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2018/08/24 11:22
S37	1140	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S38	340	S37 and (SDN) same (packet PDU near2	US-PGPUB;	OR	OFF	2018/08/24

		(flow\$1 stream\$1))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:26
S39	382	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:26
S40	91	S37 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/24 11:27
S41	6	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S42	4	"L13" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S43	4	"L14" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:45
S44	3	"L15" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S45	3	"L16" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S46	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/27 07:46

			IBM_TDB			
S47	4	"L18" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S48	3	"L19" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S49	39979	(H04L43/026 H04L12/6418 H04L43/028 H04L49/70 H04L69/161).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S50	416	S49 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:46
S51	4	S46 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:47
S53	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:48
S54	1	"L12" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/27 07:49
S55	404	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/03 20:14
S56	1	"20170099196"	DERWENT	OR	OFF	2019/03/27 16:32
S57	1	"20100208590"	DERWENT	OR	OFF	2019/03/27

						16:33
S58	1	"20140052836"	DERWENT	OR	OFF	2019/03/27 16:33
S59	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 16:59
S60	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 17:04
S61	7	"L6" and (OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S62	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S63	4	S62 and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S64	1524	"20170099196" "20020009053" "20150117313" "20180102976" "20130315237" "20080263424" "9391912" "20120020301" "9871734" "7417948" "8031593" "9178661" "20150350048" "20140181282" "9112807" "20170171085" "9853903" "20060153204" "20150289159" "9503365" "20040090923" "7242668" "8036107" "20130152187" "20130121298" "9220110" "8677489" "8577363" "20080049619" "20020196789" "20130198805" "20120142341" "20180167337" "6965666" "9277538" "10027559" "20160127223" "20170331750" "7852767" "20170104692" "6400681" "20150089048" "20150207724" "20140304776" "7917471" "20150085655" "7116661" "9894694" "20140194068" "20150305006" "20180167987" "20080052387" "20130100797" "20120201140" "20150295808" "20150207677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"9667556" "20150365879" "20150304209" "20140297847" "9485185" "20110116405" "9100285" "20160278140" "20170317933" "20170063660" "20080049624" "5282270" "20080049769" "20180091388" "9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313" "20140050106" "20140043999" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20160134502" "20080049615" "9979595" "20120230214" "20150365846" "20160344611" "20080049628" "20120230328" "20120314573" "20030108030" "20080049746" "20080049777" "20120257617" "20140064100" "20160080272" "20160112896" "20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637"				
S65	370	"20070076653" "20080049630" "20130033984" "7933214" "20130003538" "7203190" "20120127881" "20080049748" "20140092723" "20110032821" "20130135993" "20080052393" "9596169" "20140321273" "8687614" "20080052206" "20090067399" "20080049649" "20170324674" "9479341" "20110317580" "20080049640" "20120236729" "20170310600" "9014204" "20130322249" "20080049753" "20160057062" "20160044095" "7684332" "20150295998" "20120082161" "20130294243" "20170339217" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42

		"20120321052" "20080049637"				
S66	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S67	104	S66 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:42
S68	1264	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S69	478	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:43
S70	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S71	17590	370/389.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/27 22:44
S72	1	"15497119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 10:50
S73	2	"15769777"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/28 13:55
S74	4	370/389.ccls. and DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2019/04/12 21:18

			EPO; JPO; DERWENT; IBM_TDB			
S75	776	DPI and (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:18
S78	815	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/04/12 21:25
S79	249	DPI same (SDN) and (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:27
S80	460	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S81	4	"L17" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:29
S82	403	"7852767" "20080052394" "20110289578" "20080049776" "20170257319" "20140071977" "20080049628" "20120230328" "20120314573" "20030108030" "8015294" "20150110097" "20080049775" "20120182864" "20140226485" "20080049632" "8194555" "8223654" "20120321052" "20080049637" "20160113006" "8358580" "9602265" "8520603" "20080049626" "9253661" "20150138955" "20120327816" "20160380878" "20080002677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:30
S83	73	"9088581" "8780721" "20100085887" "20140064086" "9479506" "9661514" "20100054140" "9872185" "8743703" "20130322265" "9112729" "20110238985" "20080052401" "8670313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/12 21:31
S84	2104	"20170099196" "20020009053" "7417948" "20080263424"	US-PGPUB; USPAT;	OR	OFF	2019/05/28 12:26

"20150117313" "20120020301"
 "9112807" "9391912" "20140181282"
 "8031593" "9178661" "20170171085"
 "6965666" "20090067399"
 "20180102976" "20130315237"
 "9871734" "20050232222" "6944150"
 "9503365" "7471653" "20040090923"
 "7242668" "10165492" "20160036673"
 "20170104692" "20150305006"
 "10027559" "20180109565" "9479506"
 "8224371" "20130121298"
 "20180262924" "20060153204"
 "9220110" "9832092" "20060190612"
 "8045515" "20140194068" "9853903"
 "9584387" "20070058545" "9277538"
 "7492728" "20130100797" "9661514"
 "10193941" "9112729" "20160127223"
 "8036107" "20170331750"
 "20080052387" "7055174"
 "20150195185" "20110238985"
 "20110116405" "8913596" "10069736"
 "20080049769" "20170317933"
 "9872185" "20080049624"
 "20150089048" "20150254303"
 "20190089587" "10095878"
 "20150085655" "20080049776"
 "20100085887" "8670313"
 "20140297847" "20120230214"
 "20170364702" "20080049775"
 "8880115" "20140050106" "8743703"
 "20150207724" "20130322265"
 "20140064086" "8565805" "9374281"
 "8687614" "20140071977" "9667556"
 "20080049619" "20190037383"
 "20080052394" "9842135"
 "20190036888" "20190095478"
 "20140043999" "20190018975"
 "8520603" "20130152187"
 "20120127881" "20140064100"
 "10298476" "9485185" "20080049630"
 "20080049628" "20160080272"
 "8223654" "20150289159"
 "20120230328" "9014204"
 "20130135993" "20130033984"
 "20080049746" "20080049615"
 "7684332" "20160134502"
 "20110289578" "20180084475"
 "20140321273" "20080049649"
 "20080052401" "9479341"
 "20110317580" "20080052393"
 "8358580" "20120269071" "8619596"
 "20150127783" "9253661"
 "20110032821" "20080049777"
 "20150207677" "20080049748"
 "20120314573" "8102770" "9602265"
 "9241277" "9100285" "20130294243"
 "20170366395" "20080052206"
 "20180365040" "8194555" "8677489"
 "20150304209" "9042370"
 "20120236750" "8015294"
 "20150295998" "20080049637"
 "20150110097" "8576722" "7852767"
 "20020152315" "20150373061"
 "20120257617" "9054986" "8619820"

USOCR;
 FPRS;
 EPO; JPO;
 DERWENT;
 IBM_TDB

		"8307065" "20130322249" "20180097853" "20080049745" "20170339217" "6614784" "8107366" "20160057062" "20080002677" "20120236729" "8064391" "20150138955" "20170324652" "8811160" "20130198805" "9979595" "20150149631" "8213366" "20160380878" "20120321052" "20120127882" "20080002676" "9240906" "20080049747" "20080049640" "7940735" "20080317032" "20080049632" "20080049650" "8948036" "20140226485" "20030169688" "10002011" "7808918" "20080049626" "9832090" "9621361" "20060018318" "20180248788" "20160043940" "7089027" "20150312283" "20130322432" "9794855" "20190090172" "20120201139" "20140043977" "20120327816" "20080049753" "9225609" "20150350048" "20180048549" "9225646" "8577363" "20080002716" "20080049641" "8374090" "9118717" "10084642"				
S85	843	"6944150" "9503365" "7471653" "20040090923" "7242668" "10165492" "20160036673" "20170104692" "20150305006" "10027559" "20180109565" "9479506" "8224371" "20130121298" "20180262924" "20060153204" "9220110" "9832092" "20060190612" "8045515" "20140194068" "9853903" "9584387" "20070058545" "9277538" "7492728" "20130100797" "9661514" "10193941" "9112729" "20160127223" "8036107" "20170331750" "20080052387" "7055174" "20150195185" "20110238985" "20110116405" "8913596" "10069736" "20080049769" "20170317933" "9872185" "20080049624" "20150089048" "20150254303" "20190089587" "10095878" "20150085655" "20080049776" "20100085887" "8670313" "20140297847" "20120230214" "20170364702" "20080049775" "8880115" "20140050106" "8743703" "20150207724" "20130322265" "20140064086" "8565805" "9374281" "8687614" "20140071977" "9667556" "20080049619" "20190037383" "20080052394" "9842135" "20190036888" "20190095478" "20140043999"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:27
S86	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2019/05/28 12:29

			DERWENT; IBM_TDB			
S87	6	"20150117313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:30
S88	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 12:31
S89	4716	(SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:01
S90	1299	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
S91	497	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:02
S92	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/05/28 13:03
S93	837	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/05/28 13:04
S94	31	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/05/28 13:05
S95	1320	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR;	OR	OFF	2019/07/01 14:58

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S96	32	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 15:04
S97	857	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 15:05
S98	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:05
S99	3	"20100208590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:05
S100	7	"20140052836"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:06
S101	5	"20120020301"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:06
S102	10	"15126288"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/01 15:25
S103	1	"20170099196"	DERWENT	OR	OFF	2019/07/01 15:26
S104	3	"20160219080"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	OFF	2019/07/01 16:15

			IBM_TDB			
S105	13	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:23
S106	4	"20140094183"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:35
S107	5	"20170034834"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/01 16:36
S108	0	370/\$.ccls. AND mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/03 22:43
S109	13	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/07/03 22:44
S110	3	370/389.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/03 22:44
S111	63	370/\$.ccls. and DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/07/03 22:44
S112	10	"L12" and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/23 20:16
S113	547	(SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2019/12/23 20:16

			EPO; JPO; DERWENT; IBM_TDB			
S114	966	DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:17
S115	1399	(OpenFlow near5 (control\$4)) same(match\$3 near3 (sequence near2 (number\$1)) rule\$1 polic\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/23 20:17
S116	128	S115 and (SDN) same (packet PDU near2 (flow\$1 stream\$1)) same(check\$3 match\$3 near2 (criteria criterion rule\$1 polic\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/23 20:17
S117	38	different entit\$3 AND DPI and ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:18
S118	17	mirror\$3 WITH DPI AND SDN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:50
S119	9	((Barsheshet)NEAR3(Yossi)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:50
S120	4	((Doctori)NEAR3(Simhon)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:50
S121	102	((Solomon)NEAR3(Ronen)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:50
S122	235	(SDN) same (packet PDU near2 (flow\$1 stream\$1))same DPI	US-PGPUB; USPAT;	OR	OFF	2019/12/23 20:51

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S123	561	DPI and (SDN) same (packet PDU near2 (flow\$1 stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/23 20:51
S124	0	different entit\$3 same ((deep packet inspection) or DPI) same ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:53
S125	11	different entit\$3 and ((deep packet inspection) or DPI) same ((software defined network\$3) or(SDN)) and (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:53
S126	24	different entit\$3 and ((deep packet inspection) or DPI) and ((software defined network\$3) or(SDN)) same (packet or PDU near2 (flow\$1 or stream\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 20:54
S127	1882	"20020009053" "20080263424" "7417948" "20120020301" "20150117313" "20140181282" "8031593" "20130315237" "9112807" "9871734" "9391912" "9178661" "20170171085" "20150350048" "10129122" "9853903" "20130152187" "8677489" "20060153204" "20130198805" "20150289159" "20040090923" "20080049619" "7242668" "6965666" "10193941" "20140304776" "9872185" "7852767" "9503365" "20170331750" "8036107" "8577363" "20150089048" "20170104692" "20130121298" "20120142341" "5282270" "20060018318" "20150085655" "20150207724" "7917471" "9220110" "20120201140" "20150305006" "20170063660" "20160127223" "10484289" "10419965" "9088581" "9667556" "8780721" "7835745" "10027559" "9485185" "20130003538" "20140194068" "20150207677" "20150304209" "9479506" "9100285" "20150139085" "20080052387" "20100054140" "20130100797" "20020196789" "20150365879" "20090067399" "20140237097"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/23 21:09

		"20110116405" "7933214" "9979595" "20070076653" "20180331965" "20080049769" "20140297847" "20080049776" "20080049624" "20160344611" "20060190612" "20110289578" "20170257319" "10178017" "9661514" "20080052394" "20140064086" "20080052401" "20100085887" "20140050106" "9118717" "9300453" "9596169" "20080049628" "20160134502" "20080049615" "20170310600" "20140043999" "20160277168" "20140071977" "8743703" "20180248788" "20120230214" "20120314573" "20080049777" "20120230328" "20120127881" "20160036673" "8670313" "20120257617" "20080049630" "7116661" "20130322265" "20080049746" "20140064100" "20050198217" "20170317933" "10069736" "20080049748" "8687614" "20130033984" "20020006114" "20110032821" "20050232222" "20070076667" "20110317580" "20160080272" "9277538" "9112729" "20140321273" "20130135993" "9479341" "7055174" "10374964" "10298476" "20080052393" "20080049649" "20080049753" "8015294" "20150110097" "9014204" "20080049775" "9621361" "20080049626" "8194555" "20130322249" "8576722" "20120182864" "20080052206" "20120236729" "8160055" "9596300" "20080049640" "7684332" "9602265" "20160057062" "20100037284" "20140341047" "9240906" "8619596" "8223654" "8520603" "20160112896" "20160380878" "6614784" "9253661" "20080049637" "20140226485" "20170324674" "20080049747" "7808918"				
S128	5	"20020009053"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/23 21:19
S134	1	"15672613"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2019/12/24 21:04

12/ 24/ 2019 11:56:08 PM

C:\Users\jvoltage\Documents\EAST\Workspaces\15126288.wsp

Bibliographic Data

Application No: 15/126,288

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged:

Examiner's Signature

Initials

Title:

A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN
SOFTWARE DEFINED NETWORKS

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
09/15/2016	370	2466	ORCKIT-001-US
RULE			

APPLICANTS

ORCKIT IP, LLC., Newton, MA, UNITED STATES

INVENTORS

Yossi BARSHESET Ashdod, ISRAEL

Simhon DOCTORI Gan-Yavne, ISRAEL

Ronen SOLOMON Ranat-Gan, ISRAEL

CONTINUING DATA

This application is a 371 of PCT/US2015/026869 04/21/2015

PCT/US2015/026869 has PRO of 61982358 04/22/2014

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

12/27/2016

**** SMALL ENTITY ****

STATE OR COUNTRY

ISRAEL

ADDRESS

May Patents Ltd. c/o Dorit Shem-Tov

P.O.B 7230

Ramat-Gan, 5217102

ISRAEL

FILING FEE RECEIVED

\$500

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

May Patents Ltd.
c/o Dorit Shem-Tov
P.O.B. 7230
Ramat-Gan 5217102,
Israel

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	09/15/2016	BARSHESHET, Yossi	ORCKIT-001-US	9263

TITLE OF INVENTION:

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0	\$0	\$500	04/07/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 May Patents Ltd. c/o Dorit Shem-Tov

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

ORCKIT IP, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

DOVER,

DELAWARE, USA 19904-2778

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 600117 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /Yehuda Binder/

Date April 4, 2020

Typed or printed name Yehuda BINDER

Registration No. 73,612

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal				
Application Number:		15126288		
Filing Date:		15-Sep-2016		
Title of Invention:		A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS		
First Named Inventor/Applicant Name:		Yossi BARSHESHET		
Filer:		Yehuda Binder/Dorit Binder		
Attorney Docket Number:		ORCKIT-001-US		
Filed as Small Entity				
Filing Fees for U.S. National Stage under 35 USC 371				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	500	500

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				500

Electronic Acknowledgement Receipt	
EFS ID:	39064541
Application Number:	15126288
International Application Number:	
Confirmation Number:	9263
Title of Invention:	A METHOD AND SYSTEM FOR DEEP PACKET INSPECTION IN SOFTWARE DEFINED NETWORKS
First Named Inventor/Applicant Name:	Yossi BARSHESET
Customer Number:	131926
Filer:	Yehuda Binder/Dorit Binder
Filer Authorized By:	Yehuda Binder
Attorney Docket Number:	ORCKIT-001-US
Receipt Date:	04-APR-2020
Filing Date:	15-SEP-2016
Time Stamp:	15:40:51
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 500
RAM confirmation Number	E202044F41401971
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	ptol85b.pdf	75056	no	2
			164ff9e170473ee5eb8ff6727601aef2ceffe 17		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30098	no	2
			ad7e60ca5d5ea32d9110da1ec254a449083 d1156		
Warnings:					
Information:					
Total Files Size (in bytes):			105154		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

Doc code: IDS

PTO/SB/08a (03-15)

Doc description: Information Disclosure Statement (IDS) Filed

Approved for use through 07/31/2016. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	
	First Named Inventor	BARSHESHET, Yossi
	Art Unit	
	Examiner Name	
	Attorney Docket Number	ORCKIT-001-US

U.S. PATENTS

Remove

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S. PATENT APPLICATION PUBLICATIONS

Remove

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
Change(s) applied to document, /S.D./ 2/19/2020	1	20100208590	A1	2010-08-19	~~ALCATEL LUCENT~~ Dolganow et al.	
	2	20110264802	A1	2011-10-27	~~ALCATEL LUCENT~~ Dolganow et al.	
	3	20100212006	A1	2010-08-19	~~ALCATEL LUCENT~~ Dolganow et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS

Remove

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2672668	EP	A1	2013-12-11	JUNIPER NETWORKS INC		



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/126,288	05/12/2020	10652111	ORCKIT-001-US	9263

131926 7590 04/22/2020
May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 306 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Yossi BARSHESHET, Ashdod, ISRAEL;
ORCKIT IP, LLC., Newton, MA;
Simhon DOCTORI, Gan-Yavne, ISRAEL;
Ronen SOLOMON, Ranat-Gan, ISRAEL;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

IR103 (Rev. 10/09)

AO 120 (Rev. 08/10)

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
---	---

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been
 filed in the U.S. District Court Eastern District of Texas on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.);

DOCKET NO. 2:22-cv-276	DATE FILED 7/22/2022	U.S. DISTRICT COURT Eastern District of Texas
PLAINTIFF Orckit Corporation		DEFENDANT Cisco Systems, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 6,680,904	1/20/2004	Orckit Corporation
2 7,545,740	6/9/2009	Orckit Corporation
3 8,830,821	9/9/2014	Orckit Corporation
4 10,652,111	5/12/2020	Orckit Corporation
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT		
CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner,

v.

ORCKIT CORPORATION,
Patent Owner.

IPR2023-00554
Patent 10,652,111 B2

Before KRISTEN L. DROESCH, NATHAN A. ENGELS, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

DOUGAL, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

Petitioner, Cisco Systems, Inc., requests that we institute an *inter partes* review challenging the patentability of claims 1–9, 12–24, and 27–31 (the “challenged claims”) of U.S. Patent 10,652,111 B2 (Ex. 1001, “the ’111 patent”). Paper 1 (“Petition” or “Pet.”). Patent Owner, Orckit Corp., argues that Petitioner’s request is deficient and should not be granted. Paper 6 (“Preliminary Response” or “Prelim. Resp.”).

Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we institute an *inter partes* review.¹

B. *Related Matters*

The parties identify the following related district court litigation: *Orckit Corp. v. Cisco Systems, Inc.*, No. 2:22-cv-00276 (E.D. Tex.) (“parallel district court proceeding”). Pet. 78; Paper 7, 2.

C. *The ’111 Patent*

The ’111 patent is titled “Method and System for Deep Packet Inspection in Software Defined Networks.” Ex. 1001, code (54). Deep Packet Inspection (“DPI”) is a technique for examining network communications that can be used to extract data patterns from a data communication channel. *Id.* at 1:21–25. The extracted data patterns are useful for a variety of purposes, including network security and data analytics. *Id.*

¹ Our findings and conclusions at this stage are preliminary, and thus, no final determinations are made.

A software defined network (“SDN”) is a networking architecture that provides for centralized management of the nodes in a network, as opposed to the distributed architecture utilized by conventional networks. *Id.* at 1:30–38. For example, a SDN may utilize a controller to manage network nodes such as vSwitches. *Id.* SDN-based architectures typically decouple the data forwarding (*e.g.*, data plane) from control decisions (*e.g.*, control plane), such as routing, resources, and other management functionalities. *Id.* at 1:39–49. The decoupling may allow the data plane and the control plane to operate on different hardware, in different runtime environments, and/or operate using different models. *Id.*

Figure 1 shows a method for DPI in an SDN.

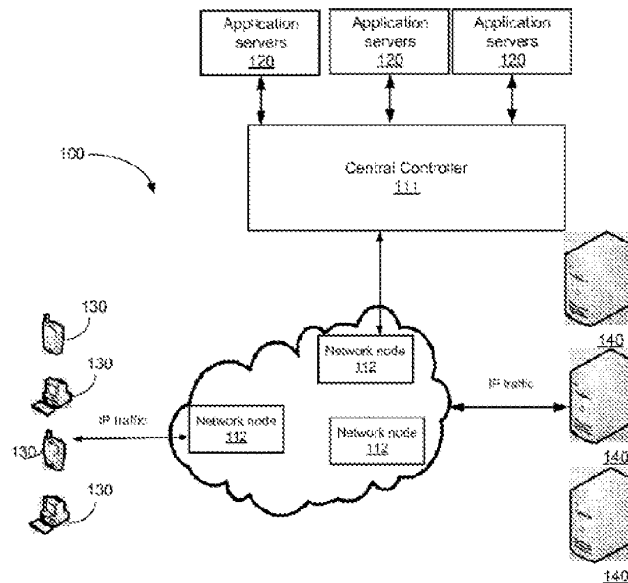


FIG. 1

In the embodiment of Figure 1, above, a network system 100 includes a controller 111 “configured to perform deep packet inspection on designated packets from designated flows or TCP sessions” by “instruct[ing] each of the network nodes 112 which of the packets and/or sessions should be directed to the controller 111 for packet inspections.” *Id.* at 4:5–11. The

network node may be instructed to either redirect the packet to controller 111 or send the packet to the destination server 140. *Id.* For example, the controller may send a “probe” instruction to a network node such that, when the network node receives a packet that matches a “packet-applicable criterion,” the network node will “mirror” (i.e., send) some or all of the packet to a security component for inspection. *Id.* at 2:3–44.

D. Illustrative Claim(s)

Of the challenged claims, claim 1 is the only independent:

1. A method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method comprising:

sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion;

receiving, by the network node from the controller, the instruction and the criterion;

receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity;

checking, by the network node, if the packet satisfies the criterion;

responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and

responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity.

Ex. 1001, 10:52–11:4.

E. Evidence

Petitioner's grounds of unpatentability rely on the following evidence:

Name	Patent Document	Exhibit
Lin	US 9,264,400 B1 (Feb. 16, 2016)	1005
Swenson	US 2013/0322242 A1 (Dec. 5, 2013)	1007
Shieh	US 2013/0291088 A1 (Oct. 31, 2013)	1006

F. Prior Art and Asserted Grounds

Petitioner asserts the following grounds of unpatentability (Pet. 4–5), supported by the declaration of Samrat Bhattacharjee, Ph.D. (Ex. 1004):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–9, 12–24, 27–31	103	Lin, Swenson
1, 5–9, 12–24, 27–30	103	Shieh, Swenson

II. DISCRETION UNDER 35 U.S.C. § 314(A)

Patent Owner contends the Board should exercise its discretion to deny institution under 35 U.S.C. § 314, citing the discretionary-denial factors articulated in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). *See* Prelim. Resp. 23–36. More specifically, Patent Owner contends that consideration of the *Fintiv* factors weigh in favor of discretionary denial. *Id.* Petitioner disagrees. Pet. 74–77.

Under § 314(a), the Director has discretion to deny institution of an *inter partes* review, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a) (“The Board institutes the trial on behalf of the Director.”); *SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)).

In *Fintiv*, the Board articulated the following factors for consideration when determining whether to exercise discretion to deny institution in view of a parallel proceeding:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Fintiv at 5–6. “These factors relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* at 6. In evaluating these factors, we take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* (citing Patent Trial and Appeal Board Consolidated Trial Practice Guide November 2019, 58).

Subsequently, the Director issued additional guidance on the application of *Fintiv*. See Vidal, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022) (“*Fintiv* Memo”). The application of this guidance is further guided by the precedential decisions of the Director in *OpenSky Indus., LLC v. VLSI Tech. LLC*, IPR2021-01064, Paper 102, 49–50 (Oct. 4, 2022) (precedential) and *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-

01242, Paper 23 (Feb. 27, 2023) (precedential) (“*CommScope*”).

Accordingly, we are instructed to consider compelling merits under the sixth *Fintiv* factor only after a determination that the first five *Fintiv* factors favor discretionary denial. *CommScope*, 4–5. “Compelling, meritorious challenges are those in which the evidence, if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.” *Fintiv* Memo 4.

For the reasons that follow, although we find that the considerations of the first five *Fintiv* factors weigh in favor of denying institution in this case, we determine that the Petition presents compelling merits as to the challenged claims, and thus, we decline to exercise our discretion to deny the Petition.

A. Factor 1: Whether the Court Granted a Stay

Patent Owner contends that Petitioner’s motion to stay filed in the parallel district court proceeding was promptly denied, which strongly favors discretionary denial. *See* Prelim. Resp. 25–26; Ex. 2005, 3. According to *Fintiv*, the existence of a district court stay pending Board resolution of an *inter partes* review has weighed strongly against discretionary denial, although a denial of such a request sometimes weighs in favor of discretionary denial. *Fintiv* at 6–8. Due to the denial of Petitioner’s motion to stay in the parallel district court proceeding, we determine that the considerations of the first *Fintiv* factor weigh in favor of discretionary denial.

B. Factor 2: Proximity of Trial Date

Patent Owner asserts that the second *Fintiv* factor weighs heavily in favor of discretionary denial because trial in the parallel district court proceeding is scheduled to begin March 4, 2024 and a final written decision

is expected no later than September 26², 2024. *See* Prelim. Resp. 26–27 (citing Ex. 2001, 1). Patent Owner further indicates that the most recent statistics indicate a time-to-trial in the Eastern District of Texas of 19 months, and using these statistics, the projected trial date would be around February 2024, which is roughly 7 months before an expected final written decision. *See id.* at 27–29.

Due to the projected trial date based on time-to-trial statistics and the actual trial date being more than six months before an expected final written decision, we determine that the considerations of the second *Fintiv* factor weigh in favor of discretionary denial.

C. Factor 3: Investment in the Parallel Proceeding

Petitioner contends that the third *Fintiv* factor favors institution because the parallel district court proceeding is in its very early stages and the investment in it has been minimal. *See* Pet. 76. Petitioner also asserts that it filed preliminary invalidity contentions on February 2, 2023 and that the claim construction hearing is not scheduled until September 7, 2023. *See id.*

Patent Owner asserts that the third *Fintiv* factor favors denial of institution because significant work in the parallel district court proceeding has already taken place, noting that the parties have produced over 2.4 million pages of discovery and, that infringement and invalidity contentions have been served and supplemented several times. *See* Prelim. Resp. 30 (citing Exs. 2002, 2003, 2007, 2011, 2012, 2014, 2015–2020). Patent Owner contends that by the time of institution, discovery will be nearly complete, and the Markman hearing is scheduled for September 7, 2023. *See id.* at 30–31 (citing Ex. 2001, 3–4).

² Patent Owner mistakenly lists September 13 instead of September 26.

After consideration of the substantial investment in the parallel district court proceeding by the parties and district court, we determine that the considerations of the third *Fintiv* factor weigh in favor of discretionary denial.

D. Factor 4: Overlap Between the Issues Raised in the Petition and in the Parallel Proceeding

Patent Owner contends that the fourth *Fintiv* factor weighs in favor of denying institution because each claim at issue in the parallel district court proceeding is at issue in the Petition, and same references (Lin, Shieh, and Swenson) are identified in Petitioner's invalidity contentions. Prelim. Resp. 32.

The Petition includes the following stipulation:

if the Board institutes trial, Petitioner will cease asserting in the parallel litigation the combination of references on which trial is instituted for the claims on which trial is instituted.

Pet. 77.

Patent Owner correctly contends that this stipulation is a *Sand Revolution* – style stipulation, which the Board has routinely found to weigh only marginally in favor of not exercising discretion to deny institution. Prelim. Resp. 33 (case citations omitted). Accordingly, we determine the considerations of the fourth *Fintiv* factor weigh only marginally against discretionary denial. *See Sand Revolution II LLC v. Continental Intermodal Group–Trucking LLC*, IPR2019 01393, Paper 24 at 12 (PTAB June 16, 2020) (informative)).

E. Factor 5: Whether Petitioner and Defendant are the Same Party

There is no dispute that Petitioner and the defendant in the parallel district court proceeding are the same. Pet. 77; Prelim. Resp. 35. Thus, we determine that the fifth *Fintiv* factor weighs in favor of discretionary denial.

F. Factor 6: Other Circumstances, Including the Merits

In view of the above, we determine that the first five *Fintiv* factors favor discretionary denial. Thus, under the sixth factor we must consider whether the Petition presents compelling merits. *CommScope*, 4–5.

Neither party addresses the compelling merits standard in any detail. Petitioner asserts that “the analysis in Grounds 1-2 provides a compelling unpatentability challenge.” Pet. 77. Patent Owner argues that the grounds are not compelling because they do not show how the combination of prior art teaches all of the elements of the claims. Prelim. Resp. 35–36.

We agree with Petitioner that the Petition presents compelling merits at least as to unpatentability of claim 1 over Lin and Swenson. As part of our analysis below in Section III.D, we discuss the merits of the Petition under the standard required for institution and then discuss our conclusion that the merits are compelling.

G. Conclusion

Under the Director’s guidance, we cannot “discretionarily deny institution in view of parallel district court litigation where a petition presents compelling evidence of unpatentability.” *Fintiv* Memo 2. Because that is the case here, as explained below in Section III.D.4, we determine that we should not exercise discretion to deny institution in this proceeding under 35 U.S.C. § 314(a).

III. ANALYSIS

A. Legal Standards

Petitioner bears the burden to demonstrate unpatentability. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). At this preliminary stage, we determine whether the information

presented in the Petition shows a reasonable likelihood that Petitioner would prevail in establishing that at least one of the challenged claims would have been obvious over the proposed combinations of prior art. *See* 35 U.S.C. § 314(a).

A claim is unpatentable as obvious if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). We resolve the question of obviousness based on underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the prior art and the claims; (3) the level of skill in the art; and (4) when in evidence, objective indicia of nonobviousness. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

We apply these principles to the Petition’s challenges.

B. Level of Ordinary Skill in the Art

We review the grounds of unpatentability in view of the understanding of a person of ordinary skill in the art at the time of the invention. *Id.* at 13, 17. Petitioner asserts that a person of ordinary skill in the art (POSA)

would have had a bachelor’s degree in computer science, computer engineering, or an equivalent, and two years of professional experience, and a POSA would have had a working knowledge of hardware and software for packet-switched networking. EX1004, ¶¶48-49. Lack of work experience can be remedied by additional education and vice versa. *Id.*, ¶48.

Pet. 5.

“Patent Owner does not dispute Petitioner’s definition, except noting that other majors, such as electrical engineering and other similar majors could be equivalent to computer science or computer engineering.” Prelim. Resp. 14.

We are persuaded, on the present record, that Petitioner’s proposal is consistent with the problems and solutions in the ’111 patent and prior art of record. We adopt Petitioner’s definition of the level of skill for the purposes of this Decision.

C. Claim Construction

In *inter partes* review, we construe claims using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b) (2022).

Petitioner provides constructions of “controller” and “instruction.” Pet. 5–8. Patent Owner “takes no positions regarding these constructions,” and does not offer any other constructions. Prelim. Resp. 13.

We determine that no terms need to be construed at this time. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. 35 U.S.C. § 103 – Lin and Swenson

Petitioner argues that the combination of Lin and Swenson renders obvious the subject matter of claims 1–9, 12–24, and 27–31. Pet. 13–54. Patent Owner argues Petitioner has not demonstrated a reasonable likelihood

of success in showing that at least claim 1 is unpatentable. Prelim.
Resp. 14–17.

For the reasons expressed below, we determine that Petitioner has established a reasonable likelihood of succeeding in showing that at least claim 1 is unpatentable over the combination of Lin and Swenson.

In the below analysis, we first review the cited prior art of Lin and Swenson, and then address the parties’ arguments with respect to the claims.

1. Lin

Lin is titled “Software Defined Networking Pipe for Network Traffic Inspection.” Ex. 1005, code (54). Lin teaches an “SDN controller inserts flow rules in a flow table of [an] SDN switch to create an SDN pipe between a sender component and a security component.” *Id.* at 1:60–62. “The SDN pipe allows outgoing packets sent by the sender component to be received by the security component” for inspection. *Id.* at 1:64–2:2. Further the SDN controller includes a flow policy database with flow policies that are enforced by the controller on network traffic transmitted over the SDN computer network. *Id.* at 4:12–16.

2. Swenson

Swenson discloses a system and method for “selectively monitoring traffic in a service provider network.” Ex. 1007, Abstr. Swenson teaches “[t]he network 120 is a communication network that transmits data between the user devices 110, the steering devices 130 and the origin server 160 and/or the video optimizer 150.” *Id.* ¶ 23. In one embodiment, “the network controller 140 interfaces with the steering device 130 to coordinate the monitoring and characterization of network traffic.” *Id.* ¶ 26. “[T]he steering device 130 receives instructions from the network controller 140 based on

the desired criteria for characterizing flows of interest for further inspection.” *Id.*

3. *Claim 1*

Petitioner argues that independent claim 1 is taught by the combination of Lin and Swenson. Pet. 13–33.

The preamble of claim 1 defines the physical components of claim 1, namely “a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node.” Ex. 1001, 10:52–55. We determine that Petitioner has shown by a reasonable basis that both Lin and Swenson disclose the physical components of claim 1. Pet. 13–23. For example, Petitioner identifies Lin as teaching a software defined network that transmits packets over the network with the use of an SDN controller (610) and an SDN switch (620) (i.e., the network node), where the packets pass between two entities (sender 622 and Next hop). *Id.* at 13–17 (citing e.g., Ex. 1005, 1:7–9, 4:8–31, 4:33–67, Figs. 1, 6; Ex. 1004 ¶¶ 75–78); *see also id.* at 20–22 (discussing similar teachings in Swenson). Petitioner further argues that Lin and Swenson have “substantially similar . . . architecture” and function in similar ways. *Id.* at 19–22.

The first method step of claim 1 requires “sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion.” Ex. 1001, 10:56–58. Concerning this limitation, Patent Owner argues that that “[t]he Petition . . . fails to explain how Lin’s SDN controller 610 and SDN switch 620 are discrete elements on a packet network such that controller 610 sends the instruction and criterion to switch 620 *over the packet network* as claimed.” Prelim. Resp. 15. In making this argument, Patent Owner cites to page 25 of the Petition which states: “Lin

explains that a controller (i.e., the SDN controller) controls network nodes (i.e., the SDN switches) in a packet network for the reasons stated above for Element [1.0].” Pet. 25. Patent Owner does not address the discussion of the packet network in the prior section (e.g., Pet. 13–17 (discussing Lin) and 20–25 (discussing Lin in combination with Swenson)). Thus, Patent Owner’s argument amounts to an assertion that does not address the positions outlined in the Petition.

The Petition identifies that Lin teaches that in its system, “[t]he SDN controller 610 and the SDN switch 620 are logically separate components.” Pet. 17 (quoting Ex. 1005, 3:51–52). The Petition identifies that Lin teaches the “transmission of packets over the SDN computer network 600.” *Id.* at 14 (quoting Ex. 1005, 4:19–21). And the Petition provides evidence that one of skill in the art “would have known that [Lin’s] computer network is a packet network.” *Id.* (citing Ex. 1004 ¶¶ 75–76). The Petition further specifies how the controller provides instructions and criterion to the switch (*id.* at 25–27), which are separate components connected over the network (*id.* at 14, 17). In view of these arguments and evidence, we determine that the Petition provides a reasonable basis to find that the prior art teaches a packet network where the controller sends the instruction and criterion to a network node *over the packet network* as claimed.

Patent Owner does not otherwise contest Petitioner’s arguments that independent claim 1 is taught by the combination of Lin and Swenson.

We also determine that Petitioner has shown by a reasonable basis that the combination of Lin and Swenson discloses the remaining method steps of claim 1. *See* Pet. 25–33 (citing e.g., Ex. 1005, 1:58–2:4, 4:14–31, 4:33–67, 7:24–8:18, Figs. 6–9; Ex 1004 ¶¶ 88–114). For example, for the first “receiving” step, the Petition relies on the same teachings of Lin

discussed above with respect to the “sending” step. *Id.* at 27–28. Concerning the second “receiving” step, the Petition discusses how both Lin and Swenson receive packets in accordance with the claim language. *Id.* at 28–29; *see also id.* at 14–24 (discussing Lin and Swenson with respect to similar language in the preamble, addressed above). Finally, concerning the “checking” and two “responsive” steps, the Petition identifies how Lin teaches that the SDN switch implements flow rules which check if the rules are met and then “responsive” to the answer, controls the flow of packets accordingly. *Id.* at 29–33.

We have reviewed the Petition and supporting evidence and determine that the Petition demonstrates a reasonable likelihood that Petitioner would prevail in showing claim 1 unpatentable over the combination of Lin and Swenson.

4. *Compelling Merits*

Having determined that Petitioner is likely to succeed in its challenge to claim 1, and that the first five *Fintiv* factors favor discretionary denial, we now consider whether the Petition presents compelling merits. *CommScope*, 4–5.

“Compelling, meritorious challenges are those in which the evidence, if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.” *Fintiv* Memo, 4. We determine that Petitioner’s challenge as to claim 1 based on Lin and Swenson meets this standard. As set forth in the previous section, Petitioner demonstrates that at this stage all elements of claim 1 are disclosed, taught, or suggested by the combination of Lin and Swenson. If unrebutted at trial, we would conclude by a preponderance of the evidence

that at least claim 1 is unpatentable over the combination of Lin and Swenson.

Petitioner relies on various portions of Lin and Swenson for disclosing, teaching, or suggesting the limitations of claim 1. *See* Pet. 13–33; *see also infra* § III.D.3 (detailing Petitioner’s arguments). At this stage, Patent Owner has not produced persuasive rebuttal evidence. For most of the claim limitations, Patent Owner provides no rebuttal to Petitioner’s analysis. Patent Owner’s arguments addressed above do not even address the full arguments made in the Petition. Further, most, if not all, of the positions set forth in the Petition for claim 1 are based on the explicit teachings in the prior art. In short, we determine that, on this preliminary record, Petitioner’s challenge to claim 1 meets the “compelling merits” standard as set forth in the *Fintiv* Memo.

5. *Claims 2–9, 12–24, 27–31*

Claims 2–9, 12–24, and 27–31 all depend from claim 1. The Petition provides argument and supporting evidence to support its position that these claims are also unpatentable over the combination of Lin and Swenson. Pet. 33–54. Patent Owner does not separately address these claims. *See generally*, Prelim. Resp.

We have reviewed the Petition and supporting evidence and determine that the Petition demonstrates a reasonable likelihood that Petitioner would prevail in showing these claims unpatentable over the combination of Lin and Swenson.

E. *35 U.S.C. § 103 – Shieh and Swenson*

Petitioner argues that the combination of Shieh and Swenson renders obvious the subject matter of claims 1, 5–9, 12–24, and 27–30. Pet. 54–73.

Patent Owner argues Petitioner has not demonstrated a reasonable likelihood of success showing that at least claim 1 is unpatentable. Prelim. Resp 17–23.

For the reasons expressed below, we determine that Petitioner has not established a reasonable likelihood of succeeding in showing that at least claim 1 is unpatentable over the combination of Shieh and Swenson.

In the below analysis, we first review Shieh, and then address the parties’ arguments with respect to the claims.

1. Shieh

Shieh is titled “Cooperative Network Security Inspection.” Ex. 1006, code (54). Shieh relates to a network security system where a network access device inspects a packet received from a source node which is destined to a destination node. *Id.* at Abstr. If the network access device determines the packet needs to “undergo security processing” it “is transmitted to a security device . . . to perform content inspection.” *Id.* Alternatively, “[t]he packet is routed to the destination node without forwarding . . . to the security device.” *Id.*

2. Claim 1

Petitioner argues that independent claim 1 is taught by the combination of Shieh and Swenson. Pet. 54–66. Similar to the ground based on Lin and Swenson, Petitioner argues that Shieh and Swenson have similar architecture and function in similar ways. *Id.* at 55–62.

Concerning the “packet-applicable criterion,” which is relevant to almost all of the method steps, the Petition relies on Shieh for “disclos[ing] separate packet-applicable criterion to determine which packets should be forwarded to the security device pursuant to the filtering rules.” *Id.* at 62 (citing Ex. 1004 ¶ 224). The Petition then states that specific examples in Shieh include the identification of “TCP FIN or TCP RST packets” and that

“These correspond to the claimed packet-applicable criterion.” *Id.* at 63 (citing Ex. 1006³ ¶¶ 35, 36, 49) (emphasis omitted).

Petitioner’s position concerning the “packet-applicable criterion” is unclear. For example, it is unclear how identification of “TCP FIN or TCP RST packets” corresponds to the teachings surrounding filtering rules in Shieh. Further, Shieh does not appear to teach what happens to a packet in a special event such as a TCP FIN or TCP RST packet is identified. *See* Ex. 1006 ¶ 36. As discussed by Patent Owner, “Shieh discloses that packet destinations are determined by the bypass flag—which is separate from the TCP FIN or TCP RST packet.” Prelim. Resp. 19 (citing Ex. 1006 ¶¶ 36–37); *see also id.* at 19–21. The Petition asserts that they are related, but does not explain how. *See e.g.*, Pet. 62–63, 65.

As the Petition relies on identification of TCP FIN and TCP RST packets in Shieh for the “packet-applicable criterion,” we cannot say that Petitioner at this time has provided a reasonable basis for us to determine that claim 1 is unpatentable over the combination of Shieh and Swenson.

3. *Claims 5–9, 12–24, 27–30*

Claims 5–9, 12–24, and 27–30 all depend from claim 1. Thus, the Petition does not provide a reasonable basis for us to determine that these claims are unpatentable over Shieh and Swenson for the same reasons as claim 1.

³ The citation in the Petition uses “*id.*” in error, pointing to Ex. 1004 instead of listing Ex. 1006.

IV. CONCLUSION

For the foregoing reasons, we have determined that there is a reasonable likelihood that the Petitioner would prevail with respect to at least one claim challenged in the Petition. We, therefore, institute trial as to all challenged claims on all grounds stated in the Petition.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, *inter partes* review as to claims 1–9, 12–24, and 27–31 of U.S. Patent 10,652,111 B2 is instituted; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this decision.

PETITIONER:

Jeffrey Blake
jblake@merchantgould.com
Daniel McDonald
dmcdonald@merchantgould.com

PATENT OWNER:

James Carmichael
jim@carmichaelip.com
Stephen McBride
stevemcbride@carmichaelip.com