# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6209138

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
VISUAL IQ, INC.	07/20/2020

## **RECEIVING PARTY DATA**

Name:	THE NIELSEN COMPANY (US), LLC
Street Address:	85 BROAD STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10004

## **PROPERTY NUMBERS Total: 40**

Property Type	Number
Application Number:	13492493
Application Number:	13789453
Application Number:	13789459
Application Number:	14145625
Application Number:	15603352
Application Number:	14322353
Application Number:	61798628
Application Number:	62099037
Application Number:	14978489
Application Number:	14978609
Application Number:	14145521
Application Number:	61922680
Application Number:	14584494
Application Number:	61922695
Application Number:	14584588
Application Number:	14585728
Application Number:	62099070
Application Number:	14969773
Application Number:	62098159
Application Number:	14972801

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Property Type	Number
Application Number:	62099074
Application Number:	14973246
Application Number:	62099077
Application Number:	14978403
Application Number:	14465838
Application Number:	62325160
Application Number:	15490751
Application Number:	62324799
Application Number:	15491903
Application Number:	62356092
Application Number:	15630806
Application Number:	16052447
Application Number:	15132683
Application Number:	62324787
Application Number:	15490757
Application Number:	62324568
Application Number:	15491908
Application Number:	62234569
Application Number:	15137628
Application Number:	14823670

### **CORRESPONDENCE DATA**

**Fax Number:** (312)580-9696

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: HANLEY, FLIGHT & ZIMMERMAN, LLC

Address Line 1: 150 S. WACKER DRIVE

Address Line 2: SUITE 2200

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	20361 GENERAL
NAME OF SUBMITTER:	SERGIO D. FILICE
SIGNATURE:	/SERGIO D. FILICE/
DATE SIGNED:	07/20/2020

# **Total Attachments: 3**

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# ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Visual IQ, Inc. a Delaware Corporation, having a place of business at 75 Second Ave, Suite 330, Needham, Massachusetts, 02494, (hereinafter "Assignor") hereby assigns to The Nielsen Company (US), LLC., a Delaware Limited Liability Company, having a place of business at 85 Broad Street, New York, New York 10004, (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the assets identified in the attached schedule A. The conveyance is inclusive of all inventions corresponding to the assets identified in the attached schedule, all priority rights in said assets, all rights to claim priority to or from said assets, all rights to file any additional patent application(s) anywhere in the world relating to said assets, all international patent application(s) relating to said assets, all patent application(s) filed in or to be filed in any country in the world relating to said assets or the inventions disclosed in said assets, all patent(s) issued or to be issued in any country in the world for said assets, and all reissue(s), reexamination(s), continuation(s), divisional(s) and/or extension(s) thereof relating to said assets. This assignment includes all rights associated with said assets including, without limitation, all patent right(s) in any and all countries and all right(s) to claim priority to and/or from any application(s) or patent(s) in any and all countries. No rights whatsoever are reserved to the undersigned Assignor, but instead all rights relating to the assets identified in the attached schedule are hereby transferred to, and accepted by, the Assignee. This assignment is governed by the Law of the State of Illinois, United States of America.

The undersigned hereby authorizes and requests said that all Letters Patent be issued to said Assignee. The undersigned have authority to enter into this agreement on behalf of the entity for which he is an officer.

WITNESS my hand this2	Oth day of	July	, 2020.
Ву:	Visual IQ, Inc. Sal Karottki Senior Vice Presid	dent, Intellectual Prop	perty
	The Nielsen Co	ompany (US), LL0	<b>3</b> .

By:

Senior Vice President, Intellectual Property

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# SCHEDULE A

United States - (US)	MACHINE LEARNING TECHNIQUES THAT IDENTIFY ATTRIBUTION OF SMALL SIGNAL STIMULUS IN NOISY RESPONSE CHANNELS	8 6/29/2016	10,068,188	9/4/2018	6/22/2017	15/630,806	20361/81174229US02
United States - (US)	MACHINE LEARNING TECHNIQUES THAT IDENTIFY ATTRIBUTION OF SMALL SIGNAL STIMULUS IN NOISY RESPONSE CHANNELS	6/29/2016			6/29/2016	62/356,092	20361/81174229US01
United States - (US)	MEDIA SPEND MANAGEMENT USING REAL-TIME PREDICTIVE MODELING OF MEDIA SPEND EFFECTS ON INVENTORY PRICING	4/19/2016			4/19/2017	15/491,903	20361/81174226US02
United States - (US)	IMPROVING MEDIA SPEND MANAGEMENT USING REAL-TIME PREDICTIVE MODELING OF MEDIA SPEND EFFECTS ON INVENTORY PRICING	4/19/2016			4/19/2016	62/324,799	20361/81174226US01
United States - (US)	MEDIA SPEND MANAGEMENT USING REAL-TIME PREDICTIVE MODELING OF TOUCHPOINT EXPOSURE EFFECTS	4/20/2016			4/18/2017	15/490,751	20361/81174223US02
United States - (US)	MEDIA SPEND MANAGEMENT USING REAL-TIME PREDICTIVE MODELING OF TOUCHPOINT EXPOSURE EFFECTS	4/20/2016			4/20/2016	62/325,160	20361/81174223US01
United States - (US)	APPORTIONING A MEDIA CAMPAIGN CONTRIBUTION TO A MEDIA CHANNEL IN THE PRESENCE OF AUDIENCE SATURATION	8/22/2014			8/22/2014	14/465,838	20361/81174218US01
United States - (US)	Н	12/31/2014			12/22/2015	14/978,403	20361/81174214US02
United States - (US)		12/31/2014			12/31/2014	62/099,077	20361/81174214US01
United States - (US)	+	12/31/2014			12/17/2015	14/973,246	20361/81174210US02
United States - (US)	MARKETING TOUCHPOINT ATTRIBUTIONS IN A SEGMENTED MEDIA CAMPAIGN	12/31/2014			12/31/2014	62/099,074	20361/81174210US01
United States - (US)	REAL-TIME MARKETING CAMPAIGN STIMULI SELECTION BASED ON USER RESPONSE PREDICTIONS	12/30/2014			12/17/2015	14/972,801	20361/81174205US02
United States - (US)	REAPPORTIONING SPENDING IN AN ADVERTISING CAMPAIGN BASED ON A SEQUENCE OF USER INTERACTIONS	12/30/2014			12/30/2014	62/098,159	20361/81174205US01
United States - (US)	SYSTEM FOR MARKETING TOUCHPOINT ATTRIBUTION BIAS CORRECTION	12/31/2014			12/15/2015	14/969,773	20361/81174201US02
United States - (US)	SYSTEM FOR MARKETING TOUCHPOINT ATTRIBUTION BIAS CORRECTION	12/31/2014			12/31/2014	62/099,070	20361/81174201US01
United States - (US)	VALIDATION OF BOTTOM-UP ATTRIBUTIONS TO CHANNELS IN AN ADVERTISING CAMPAIGN	12/30/2014			12/30/2014	14/585,728	20361/81174196US01
United States - (US)	REAL-TIME MARKETING PORTFOLIO OPTIMIZATION AND REAPPORTIONING	12/31/2013			12/29/2014	14/584,588	20361/81174191US02
United States - (US)	REAL-TIME MARKETING PORTFOLIO OPTIMIZATION AND REAPPORTIONING	12/31/2013			12/31/2013	61/922,695	20361/81174191US01
United States - (US)	MEDIA SPEND OPTIMIZATION USING ENGAGEMENT METRICS IN A CROSS-CHANNEL PREDICTIVE MODEL	12/31/2013			12/29/2014	14/584,494	20361/81174187US02
United States - (US)	MEDIA SPEND OPTIMIZATION USING ENGAGEMENT METRICS IN A CROSS-CHANNEL PREDICTIVE MODEL	12/31/2013			12/31/2013	61/922,680	20361/81174187US01
United States - (US)	MARKETING PORTFOLIO OPTIMIZATION	12/31/2013			12/31/2013	14/145,521	20361/81174181US01
United States - (US)	MANAGING DIGITAL MEDIA SPEND ALLOCATION USING CALIBRATED USER-LEVEL ATTRIBUTION DATA	12/31/2014			12/22/2015	14/978,609	20361/81174174US03
United States - (US)	MANAGING DIGITAL MEDIA SPEND ALLOCATION USING CALIBRATED USER-LEVEL ATTRIBUTION DATA	12/31/2014			12/22/2015	14/978,489	20361/81174174US02
United States - (US)	QUANTITATIVE INTEGRATION OF TOP DOWN AND BOTTOM UP ATTRIBUTION	12/31/2014			12/31/2014	62/099,037	20361/81174174US01
United States - (US)	METHOD AND SYSTEM FOR STIMULATION-RESPONSE MODELING ACROSS MULTIPLE  MARKETING CHANNELS	3/15/2013			3/15/2013	61/798,628	20361/81174171US01
United States - (US)	PERFORMING INTERACTIVE UPDATES TO A PRECALCULATED CROSS-CHANNEL PREDICTIVE MODEL	12/31/2013			7/2/2014	14/322,353	20361/81174166US03
United States - (US)	CROSS-CHANNEL PREDICTIVE MODEL	12/31/2013			5/23/2017	15/603,352	20361/81174166US02
United States - (US)	MEDIA SPEND OPTIMIZATION USING A CROSS-CHANNEL PREDICTIVE MODEL	12/31/2013			12/31/2013	14/145,625	20361/81174166US01
United States - (US)	METHOD, COMPUTER READABLE MEDIUM AND SYSTEM FOR DETERMINING TRUE  SCORES FOR A PLURALITY OF TOUCHPOINT ENCOUNTERS  METHOD AND SYSTEM FOR DETERMINING TOUCHPOINT ATTERRITION	6/8/2012			3/7/2013	13/789,459	20361/81174156US03
United States - (US)	A METHOD , COMPUTER READABLE MEDIUM AND SYSTEM FOR DETERMINING TOUCHPOINT ATTRIBUTION	6/8/2012			3/7/2013	13/789,453	20361/81174156US02
United States - (US)		-	-	₩	6/8/2012	13/492,493	20361/81174156US01
Country		ber First Filing Date	te Patent Number	Grant Date	Application Date	Application Number	Dacket Number

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# **SCHEDULE A**

United States - (US)	ONBOARDING	8/11/2015			8/11/2015	14/823,670	20361/81174296US01
	EVEN   WEIGH   ING						
United States - (US)	BRAND ENGAGEMENT TOUCHPOINT ATTRIBUTION USING BRAND ENGAGEMENT	9/29/2015			4/25/2016	15/137,628	20361/81174248US02
000000000000000000000000000000000000000	EVENT WEIGHTING	2/ 52/ 5010	1		7) 22/ (22/	04/407	-0001/011/7-100001
United States - (US)	BRAND ENGAGEMENT TOUCHPOINT ATTRIBUTION USING BRAND ENGAGEMENT	9/29/2015			9/29/2015	62/234 569	20361/8117424811501
Officer States - (OS)	EXECUTION FEEDS	4/ 13/ 2010			4/15/201/	10/101,000	20301/011/42330202
United States - (US)	DYNAMIC MEDIA BUY OPTIMIZATION USING ATTRIBUTION-INFORMED MEDIA BUY	1/19/2016			1/10/2017	15//01 008	20361/8117/13911602
Cilita Junio	EXECUTION FEEDS	4/ 13/ 2010			7/ 13/ 2010	02/327,300	20001/011/7200001
United States - (IIS)	DYNAMIC MEDIA BUY OPTIMIZATION USING ATTRIBUTION-INFORMED MEDIA BUY	4/19/2016			4/19/2016	62/324568	20361/8117423911501
United States - (US)	CROSS-DEVICE MESSAGE TOUCHPOINT ATTRIBUTION	4/19/2016	10,679,260	6/9/2020	4/18/2017	15/490,757	20361/81174236US02
United States - (US)	CROSS-DEVICE MESSAGE TOUCHPOINT ATTRIBUTION	4/19/2016			4/19/2016	62/324,787	20361/81174236US01
United States - (US)	OPTIMIZING PROMOTIONAL OFFER MIXES USING PREDICTIVE MODELING	4/19/2016			4/19/2016	15/132,683	20361/81174232US01
Officed States - (OS)	STIMULUS IN NOISY RESPONSE CHANNELS	0/23/2010			0/1/2010	10/032,447	20301/811/42230303
Inited States (IIS)	MACHINE LEARNING TECHNIQUES THAT IDENTIFY ATTRIBUTION OF SMALL SIGNAL	6/20/2016			0/1/2010	16/053 //7	20261/0117/12011002
Country	Title	First Fling Date	Patent Number	Grant Date	Application Date	Application Number   Application Date   Grant Date   Patent Number   First Filing Date	Dacket Number

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