

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4566601

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
NEDERLANDSE ORGANISATIE VOOR TOEGEPAST-NATUURWETENSCHAPPELIJK ONDERZOEK TNO	08/08/2017
RECEIVING PARTY DATA	
Name:	KONINKLIJKE KPN N.V.
Street Address:	MAANPLEIN 55
City:	THE HAGUE
State/Country:	NETHERLANDS
Postal Code:	2516 CK
PROPERTY NUMBERS Total: 5	
Property Type	Number
Application Number:	14122198
Application Number:	14122172
Application Number:	14369994
Application Number:	14056127
Application Number:	13393630
CORRESPONDENCE DATA	
Fax Number:	(312)913-0002
<i>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.</i>	
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Email:	mueller@mbhb.com
Correspondent Name:	MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
Address Line 1:	300 SOUTH WACKER DRIVE
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ATTORNEY DOCKET NUMBER:	TNO TO KPN
NAME OF SUBMITTER:	BRADLEY J. HULBERT
SIGNATURE:	/Bradley Hulbert/
DATE SIGNED:	08/25/2017
Total Attachments: 6	
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EXHIBIT E.2 – Registration Agreement

***REGISTRATION
DEED OF ASSIGNMENT***

between

Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO

and

Koninklijke KPN N.V.

Registration of the transfer of patents from TNO to KPN

THIS REGISTRATION AGREEMENT is entered into on November 30, 2016 (the "Effective Date")

BETWEEN:

1. *Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO*, a legal person by public law (i.e. the TNO Act) duly organized and existing under the laws of The Netherlands having its registered seat in 's-Gravenhage and its principal place of business at Anna van Buerenplein 1, 2595 DA in 's-Gravenhage, legally represented by Henk Jan Vink, acting Managing Director of Networked Information, and Ms. Wernke van der Weij, Manager of IP&Contracting, acting in full capacity on behalf of the Board of Management of TNO (hereinafter referred to as "TNO")

and

2. *Koninklijke KPN N.V.*, a public limited liability company duly organized and existing under the laws of The Netherlands having its registered seat in The Hague and its principal place of business at Maanplein 55, 2516 CK in The Hague, legally represented by Eelco Blok, CEO (hereinafter referred to as "KPN")

The parties to this Registration Agreement are hereinafter jointly referred to as "Parties" and individually as "Party".

BACKGROUND:

- A. The Parties entered into a deed of assignment for the transfer of patents, listed in Appendix 1 to this Registration Agreement ("the Patents"), of which Parties are the joint owners up to the effective date of the deed of assignment, to KPN, in order for KPN to be the sole owner of the Patents ("the Deed of Assignment").
- B. In this Deed of Assignment, the Parties agreed that an abbreviated document would be used as a title to apply for the recording of the change of ownership of the Patents before the applicable registries.
- C. For this purpose, the Parties enter into this Registration Agreement.

IT IS AGREED:

Article 1

The Parties agree that this Registration Agreement will be used as a title to apply for the recording of the change of ownership for the Patents to KPN before the applicable registries.

Article 2

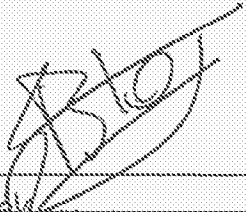
The Parties submit to the exclusive jurisdiction of the Court of The Hague, The Netherlands, to settle any dispute arising out of or in connection with this Registration Agreement.

Article 3

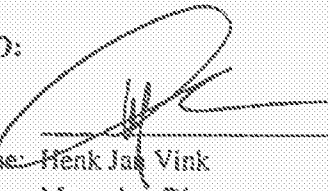
This Registration Agreement is governed by and interpreted with the laws of The Netherlands.

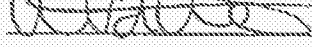
THIS REGISTRATION AGREEMENT is signed on behalf of the Parties by their duly authorized representatives:

KPN:

By: 
Name: E. Blom
Title: Chief Executive Officer
Date: 10-08-2017

TNO:

By: 
Name: Henk Jan Vink
Title: Managing Director
Date: August 3, 2017

By: 
Name: Ms. Wemke van der Weij
Title: Manager IP&Contracting
Date: August 01, 2017

Title	State	Application date	Application number	Case no	TNO ref
Spatially-segmented content delivery	KR	7-6-2012	10-2013-7030584	403571	TNO-2010197
Spatially-segmented content delivery	KR	7-6-2012	10-2015-7005410	403571	TNO-2010197
Spatially-segmented content delivery	KR	7-6-2012	10-2015-7031010	403571	TNO-2010197
Spatially-segmented content delivery	EP	7-6-2012	12725842.4	403571	TNO-2010197
Spatially-segmented content delivery	US	7-6-2012	14/122,188	403571	TNO-2010197
Spatially-segmented content delivery	CN	7-6-2012	201280027654.2	403571	TNO-2010197
Spatially-segmented content delivery	JP	7-6-2012	2014-514071	403571	TNO-2010197
Spatially-segmented content delivery	JP	7-6-2012	2016-052497	403571	TNO-2010197
Locating and retrieving segmented content	KR	7-6-2012	10-2013-7031289	403580	TNO-2011045
Locating and retrieving segmented content	EP	7-6-2012	12725837.4	403580	TNO-2011045
Locating and retrieving segmented content	US	7-6-2012	14/122,172	403580	TNO-2011045
Locating and retrieving segmented content	CN	7-6-2012	201280027641.5	403580	TNO-2011045
Locating and retrieving segmented content	JP	7-6-2012	2014-514088	403580	TNO-2011045
Controlled streaming of segmented content	EP	27-12-2012	12810311.6	403595	TNO-2011086
Controlled streaming of segmented content	US	27-12-2012	14/368,984	403595	TNO-2011086
Controlled streaming of segmented content	CN	27-12-2012	201280070941.1	403595	TNO-2011086
Controlled streaming of segmented content	JP	27-12-2012	2014-549463	403595	TNO-2011086
Controlled streaming of segmented content	JP	27-12-2012	nog.niel.bekend	403595	TNO-2011086
Network-initiated content streaming control	KR	27-12-2012	10-2014-7019733	403605	TNO-2011105
Network-initiated content streaming control	EP	27-12-2012	12818785.3	403605	TNO-2011105
Network-initiated content streaming control	US	27-12-2012	14/368,763	403605	TNO-2011105
Network-initiated content streaming control	HK	27-12-2012	151101401.4	403605	TNO-2011105
Network-initiated content streaming control	EP	27-12-2012	16163649.3	403605	TNO-2011105
Network-initiated content streaming control	CN	27-12-2012	201280070832.X	403605	TNO-2011105
Network-initiated content streaming control	JP	27-12-2012	2014-549461	403605	TNO-2011105
Network-initiated content streaming control	JP	27-12-2012	2018-143922	403605	TNO-2011105
Token-based validation method for segmented content delivery	US	17-10-2013	14/056,127	403643	TNO-2012056
Token-based validation method for segmented content delivery	EP	18-10-2013	13186211.9	403643	TNO-2012056
Token-based validation method for segmented content delivery	EP	18-10-2013	15163003.5	403843	TNO-2012056

Digital rights management for segmented content	EP	10-12-2013	13807954.5	403666	TNO-2012108
Digital rights management for segmented content	US	10-12-2013	14/650,841	403666	TNO-2012108
Streaming of segmented content	US	2-7-2014	14/898,534	403715	TNO-2013077
Streaming of segmented content	EP	2-7-2014	14734176.2	403715	TNO-2013077
Streaming of segmented content	CN	2-7-2014	20148037577.8	403715	TNO-2013077
Streaming of segmented content	JP	2-7-2014	2016-522589	403715	TNO-2013077
Providing file video streams to a client	KR	28-7-2014	10-2016-7003750	403716	TNO-2013081
Providing file video streams to a client	US	28-7-2014	14/908,024	403716	TNO-2013081
Providing file video streams to a client	EP	28-7-2014	14744830.2	403716	TNO-2013081
Providing file video streams to a client	CN	28-7-2014	201480053667.6	403716	TNO-2013081
Providing file video streams to a client	IN	28-7-2014	201627002159	403716	TNO-2013081
Determining a region of interest on the basis of a HEVC-tiled video stream	PC	28-6-2015	PCT/EP2015/084511	403749	TNO-2014034
Controlling retrieval in adaptive streaming	EP	15-12-2015	15200121.0	P2095	TNO-2014143
Enhancing a region of interest in video frames of a video stream	PC	7-10-2016	PCT/EP2016/073994	P2089	TNO-2014119
Forming a tiled video on the basis of media streams	PC	19-8-2016	PCT/EP2016/069735	P2085	TNO-2014109
Forming one or more tiled streams on the basis of one or more video streams	PC	19-8-2016	PCT/EP2016/069732	P2084	TNO-2015049
HEVC-tiled video streaming	PC	26-6-2015	PCT/EP2015/064527	P2045	TNO-2014089
Processing spherical video data on the basis of a region of interest	EP	12-10-2018	16002198.6	P2140	TNO-2018060
Spatially tiled omnidirectional video streaming	EP	25-5-2016	16001189.6	P2122	TNO-2016030
Spatially tiled omnidirectional video streaming	EP	30-5-2016	16172029.7	P2122	TNO-2016030
Updating part of a manifest file on the basis of patches	EP	11-12-2015	15198559.3	P2094	TNO-2015045
Video streams	EP	28-12-2015	15202816.3	P2100	TNO-2014132
Audio object processing based on spatial listener information	EP	30-9-2016	15191647.3	P2138	TNO-2015041
Pre-loading follow-up content	EP	2-9-2010	15172697.3	403451	TNO-2009015
Pre-loading follow-up content	EP	2-9-2010	10760271.6	403451	TNO-2009015
Pre-loading follow-up content	US	2-9-2010	137393.630	403451	TNO-2009015

Content distribution system	EP	20-12-2010	2993858	403470	TNO-2009172
Content distribution system	EP	20-12-2010	2517434	403470	TNO-2009172
Content distribution system	JP	20-12-2010	2013-515417	403470	TNO-2009172
Content distribution system	KR	20-12-2010	10-2012-7017359	403470	TNO-2009172
Content distribution system	US	20-12-2010	US-2012-0259850-A1	403470	TNO-2009172
Establishing a streaming presentation of an event	CN	27-1-2015	201580017033.X	403744	TNO-2013126
Establishing a streaming presentation of an event	EP	27-1-2015	1570360.8	403744	TNO-2013126
Establishing a streaming presentation of an event	KR	27-1-2015	10-2015-7022041	403744	TNO-2013126
Establishing a streaming presentation of an event	US	27-1-2015	15714709	403744	TNO-2013126
Complementary transport stream	EP	12-5-2016	16189289.1	P2118	TNO-2015081
Streaming virtual reality video	EP	14-9-2016	16189706.2	P2136	TNO-2016047