## **CATV Essential Patent Portfolio**

## Dolby International AB

JP5562408

#### INFOCITY, Inc.

JP5247097 JP6310109

#### INFOCITY, Inc. / Nippon Hoso Kyokai

JP6789553

#### InterDigital CE Patent Holdings, SAS

JP5877065 JP6176871

#### JVCKENWOOD Corporation

JP4620788

JP5070979

#### **KDDI CORPORATION**

JP5254162

#### LG Electronics Inc.

JP6291081 JP6392792

#### Maxell, Ltd.

JP4431598 JP4431599 JP4565049 JP4625764 JP4629789 JP4629790 JP4629791 JP4997362 JP5002370

JP5017474 JP5063827 JP5081512 JP5095018 JP5095022 JP5095026 JP5111542 JP5111543 JP5114600 JP5156795 JP5188634 JP5223027 JP5223028 JP5223029 JP5223030 JP5236112 JP5236113 JP5241945 JP5241946 JP5372383 JP5380614 JP5413534 JP5450875 JP5450876 JP5501081 JP5522644 JP5559605 JP5588489 JP5603475 JP5684415

JP5695150 JP5710895 JP5805835 JP5849126 JP5896436

#### MxH Corporation

JP7206449 JP7542271

JP7598685

#### **NEC** Corporation

JP4666231

JP5300074

JP5682181

#### **NHK** Foundation

JP5113954 JP5113955

#### Nippon Hoso Kyokai

JP5156037 JP5156038 JP5156039 JP5156143 JP5156144 JP5175883 JP5269237 JP5269238 JP5269239

JP5269240

#### Nippon Hoso Kyokai

JP5269241 JP5271445 JP5544395 JP5548726 JP5584729 JP5584730 JP5586657 JP5586658 JP5586770 JP5923137 JP6018796 JP6068721 JP6097443 JP6101384 JP6154972 JP6214809 JP6214810 JP6214811 JP6271065 JP6271066 JP6275308 JP6323805 JP6388295 JP6803357 JP6858303 JP7300250

#### **Orange SA**

JP5396600

#### Panasonic Holdings Corporation

JP7410107

#### Sharp Corporation

JP4786739 JP6363745

#### Sony Group Corporation

JP5516826 JP5595590 JP5696913 JP5696914 JP5696915 JP5708874 JP5708875 JP5725390 JP5725391 JP5725392 JP5757601 JP5777793

#### **Toshiba Corporation**

JP5254411 JP5479631 JP5921398 JP6239674

#### **TVS REGZA Corporation**

JP5087022 JP5132808 JP7230096

#### July 1, 2025

## **TVS REGZA Corporation**

JP7230097 JP7230133 JP7230134 JP7230135 JP7230136

## Fujitsu Limited

JP3918329	* Expired November 24, 2018
JP4603570	* Expired March 31, 2023
JP4791521	* Expired March 31, 2023
JP4791583	* Expired March 31, 2023

### INFOCITY, Inc.

JP3759720	* Expired May 13, 2017
JP4302537	* Expired January 7, 2024

## InterDigital CE Patent Holdings, SAS

JP2806587	* Expired October 20, 2009
JP3169903	* Expired January 31, 2017
JP3380252	* Expired November 22, 2013
JP3699129	* Expired May 22, 2017
JP3880616	* Expired December 1, 2014
JP3881236	* Expired January 4, 2015
JP4070831	* Expired November 20, 2015
JP4173535	* Expired March 15, 2015
JP4174549	* Expired November 20, 2015
JP4251668	* Expired August 21, 2015
JP4347275	* Expired August 20, 2013
JP4347276	* Expired August 20, 2013
JP4418754	* Expired October 2, 2023
JP4527135	* Expired August 21, 2015
JP4623524	* Expired August 21, 2015
JP4671248	* Expired August 20, 2013
JP4729176	* Expired October 8, 2019

## JVCKENWOOD Corporation

JP2521160	* Expired November 7, 2009
JP2853727	* Expired February 22, 2014

## JVCKENWOOD Corporation

JP2874729	* Expired January 30, 2015
JP3102416	* Expired February 22, 2014
JP3156892	* Expired July 30, 2013
JP3156893	* Expired August 19, 2013
JP3405345	* Expired January 24, 2020
JP3405347	* Expired January 24, 2020
JP3405348	* Expired January 24, 2020
JP3422458	* Expired July 11, 2017
JP3431609	* Expired July 11, 2017
JP3453696	* Expired November 7, 2016
JP3518757	* Expired January 30, 2015
JP3518761	* Expired January 30, 2015
JP3582428	* Expired November 16, 2019
JP3627734	* Expired October 29, 2013
JP3804865	* Expired January 30, 2015
JP3830074	* Expired June 15, 2020
JP4221732	* Expired October 29, 2013
JP4269506	* Expired September 29, 2020
JP4743237	* Expired September 29, 2020
JP4884505	* Expired September 29, 2020
JP5214039	* Expired September 29, 2020

# ${\sf JVCKENWOOD}\ {\sf Corporation}\ /\ {\sf Panasonic}\ {\sf Holdings}\ {\sf Corporation}$

JP2924538	* Expired January 28, 2013
JP3405344	* Expired January 24, 2020
JP3405346	* Expired January 24, 2020

#### LG Electronics Inc.

JP4278657	* Expired March 19, 2018
JP4806702	* Expired May 13, 2022

•	
JP2760799	* Expired April 28, 2008
JP2798086	* Expired April 28, 2008
JP2798087	* Expired April 28, 2008
JP2870531	* Expired April 28, 2008
JP2870532	* Expired April 28, 2008
JP2980085	* Expired April 28, 2008
JP2989742	* Expired May 20, 2014
JP2993487	* Expired April 28, 2008
JP3025658	* Expired July 20, 2010
JP3031285	* Expired July 20, 2010
JP3075063	* Expired February 17, 2014
JP3119116	* Expired June 7, 2015
JP3178467	* Expired July 20, 2010
JP3217137	* Expired July 28, 2012
JP3275881	* Expired April 28, 2008
JP3275916	* Expired July 20, 2010
JP3277894	* Expired April 28, 2008
JP3443572	* Expired July 28, 2012
JP3491431	* Expired February 20, 2016
JP3496635	* Expired March 22, 2014
JP3498403	* Expired February 10, 2015
JP3502241	* Expired August 28, 2011
JP3502260	* Expired August 28, 2011
JP3520595	* Expired March 29, 2015
JP3527908	* Expired July 28, 2012
JP3591274	* Expired February 17, 2018
JP3652176	* Expired August 13, 2019
JP3661001	* Expired July 20, 2010
JP3731379	* Expired April 8, 2019
JP3780079	* Expired October 29, 2017

JP3780780	* Expired November 19, 2019
JP3785010	* Expired December 1, 2019
JP3795266	* Expired July 30, 2019
JP3838265	* Expired April 8, 2019
JP3922110	* Expired February 20, 2016
JP4029569	* Expired January 10, 2021
JP4042419	* Expired January 31, 2022
JP4062890	* Expired April 20, 2021
JP4103933	* Expired January 11, 2022
JP4103934	* Expired January 11, 2022
JP4103935	* Expired January 11, 2022
JP4162033	* Expired April 20, 2021
JP4192995	* Expired November 10, 2017
JP4201055	* Expired January 31, 2022
JP4208033	* Expired April 19, 2016
JP4225365	* Expired January 22, 2021
JP4238928	* Expired January 31, 2022
JP4254903	* Expired April 20, 2021
JP4299976	* Expired March 2, 2021
JP4300190	* Expired July 31, 2017
JP4332284	* Expired June 9, 2020
JP4340693	* Expired March 2, 2021
JP4340694	* Expired March 2, 2021
JP4340702	* Expired February 16, 2021
JP4340708	* Expired February 16, 2021
JP4340709	* Expired February 16, 2021
JP4345694	* Expired April 27, 2015
JP4353306	* Expired February 17, 2014
JP4360382	* Expired January 19, 2019
JP4379428	* Expired December 17, 2016

JP4379528	* Expired March 28, 2022
JP4400530	* Expired November 19, 2019
JP4406672	* Expired September 30, 2024
JP4424118	* Expired December 1, 2019
JP4431617	* Expired October 29, 2017
JP4431619	* Expired October 29, 2017
JP4431633	* Expired December 17, 2016
JP4431635	* Expired December 17, 2016
JP4443060	* Expired February 9, 2021
JP4474434	* Expired January 19, 2019
JP4474486	* Expired December 3, 2023
JP4484840	* Expired June 9, 2020
JP4484945	* Expired February 17, 2018
JP4500847	* Expired December 15, 2020
JP4512664	* Expired June 9, 2020
JP4538414	* Expired October 19, 2021
JP4538488	* Expired July 31, 2017
JP4538489	* Expired July 31, 2017
JP4547097	* Expired January 22, 2021
JP4558100	* Expired February 17, 2018
JP4576066	* Expired April 10, 2021
JP4576471	* Expired January 10, 2023
JP4576481	* Expired January 10, 2023
JP4597229	* Expired June 25, 2018
JP4597231	* Expired October 19, 2021
JP4597252	* Expired February 9, 2021
JP4597266	* Expired October 19, 2021
JP4613212	* Expired October 13, 2024
JP4627790	* Expired January 22, 2021
JP4637226	* Expired January 10, 2021

* Expired March 28, 2022
* Expired February 28, 2021
* Expired June 25, 2018
* Expired February 9, 2021
* Expired July 28, 2018
* Expired December 15, 2017
* Expired December 15, 2017
* Expired December 15, 2017
* Expired April 10, 2021
* Expired February 9, 2021
* Expired December 3, 2023
* Expired December 3, 2023
* Expired February 28, 2021
* Expired February 28, 2021
* Expired January 10, 2021
* Expired June 25, 2018
* Expired December 15, 2020
* Expired December 15, 2020
* Expired April 10, 2021
* Expired June 21, 2021
* Expired July 28, 2018
* Expired January 10, 2023
* Expired July 28, 2018
* Expired November 19, 2019
* Expired October 13, 2024
* Expired June 21, 2021
* Expired October 13, 2024
* Expired June 21, 2021
* Expired October 13, 2024
* Expired October 13, 2024

JP5050129	* Expired October 13, 2024
JP5063629	* Expired June 4, 2021
JP5156803	* Expired June 4, 2021
JP5292371	* Expired October 11, 2022
JP5478690	* Expired June 4, 2021

## Maxell, Ltd. / Nippon Hoso Kyokai

JP3884881	* Expired May 21, 2019
JP4414969	* Expired May 21, 2019
JP4791567	* Expired May 21, 2019

## Mitsubishi Electric Corporation

JP2935788	* Expired June 4, 2013
JP3172425	* Expired February 1, 2016
JP3215952	* Expired April 7, 2012
JP3216531	* Expired July 24, 2016
JP3216534	* Expired August 29, 2016
JP3301055	* Expired March 29, 2016
JP3316572	* Expired April 7, 2012
JP3316573	* Expired April 7, 2012
JP3468115	* Expired August 4, 2018
JP3505378	* Expired January 29, 2018
JP3740712	* Expired June 13, 2015
JP3800886	* Expired October 12, 2019
JP3817816	* Expired March 12, 2017
JP3909947	* Expired February 16, 2018
JP4040053	* Expired March 12, 2017
JP4040078	* Expired March 12, 2017
JP4089714	* Expired June 13, 2015
JP4096995	* Expired June 13, 2015
JP4250817	* Expired August 4, 2019

## Mitsubishi Electric Corporation

JP4250832	* Expired October 14, 2019
JP4270833	* Expired September 27, 2022
JP4303085	* Expired October 23, 2023
JP4336063	* Expired June 12, 2021
JP4553996	* Expired May 14, 2018
JP4697369	* Expired July 12, 2021
JP4844588	* Expired February 1, 2020
JP4888458	* Expired October 14, 2019
JP4888459	* Expired October 14, 2019
JP4947192	* Expired May 14, 2018
JP4947198	* Expired May 14, 2018
JP5071569	* Expired February 1, 2020
JP5267707	* Expired February 1, 2020

## NEC Corporation

JP3090137	* Expired January 29, 2019
JP3332072	* Expired April 9, 2018
JP3531604	* Expired November 24, 2020
JP3832321	* Expired November 20, 2021
JP4045805	* Expired January 11, 2022
JP4051968	* Expired March 7, 2022
JP4973790	* Expired January 28, 2025
JP5056965	* Expired October 5, 2015

#### Nippon Hoso Kyokai

JP2883238	* Expired February 6, 2012
JP2904986	* Expired January 31, 2012
JP3051729	* Expired December 11, 2018
JP3096020	* Expired December 16, 2017
JP3103617	* Expired June 13, 2011
JP3253524	* Expired May 28, 2016

JP3691211	* Expired May 30, 2017
JP3795183	* Expired May 16, 2017
JP3884869	* Expired September 25, 2018
JP4266387	* Expired November 13, 2020
JP4806444	* Expired May 24, 2021

### Orange SA

JP4391412	* Expired April 30, 2023
JP4673302	* Expired June 2, 2024

# Orange SA / TDF SAS

JP3044899	* Expired January 17, 2012
JP3827718	* Expired June 13, 2015

## Panasonic Holdings Corporation

JP3008651	* Expired March 27, 2012
JP3061053	* Expired March 27, 2012
JP3061054	* Expired March 27, 2012
JP3109552	* Expired March 26, 2013
JP3114727	* Expired March 27, 2012
JP3153188	* Expired September 14, 2018
JP3154704	* Expired March 26, 2013
JP3154705	* Expired March 26, 2013
JP3154706	* Expired March 26, 2013
JP3154707	* Expired March 26, 2013
JP3162452	* Expired February 3, 2012
JP3231035	* Expired September 24, 2013
JP3231036	* Expired September 24, 2013
JP3233625	* Expired September 24, 2013
JP3233626	* Expired September 24, 2013
JP3233850	* Expired March 13, 2016

## Panasonic Holdings Corporation

• .	
JP3248807	* Expired March 25, 2014
JP3327914	* Expired March 25, 2014
JP3327915	* Expired March 25, 2014
JP3327916	* Expired March 25, 2014
JP3359328	* Expired September 24, 2013
JP3366194	* Expired October 1, 2016
JP3382569	* Expired October 14, 2019
JP3387769	* Expired February 21, 2017
JP3408469	* Expired September 14, 2019
JP3410077	* Expired September 24, 2013
JP3410078	* Expired September 24, 2013
JP3410085	* Expired March 25, 2014
JP3431465	* Expired September 11, 2017
JP3431470	* Expired September 1, 2017
JP3439738	* Expired September 24, 2013
JP3439739	* Expired September 24, 2013
JP3447207	* Expired December 5, 2017
JP3464656	* Expired August 10, 2021
JP3482750	* Expired September 28, 2015
JP3489574	* Expired February 26, 2018
JP3511013	* Expired January 22, 2021
JP3523643	* Expired March 27, 2018
JP3526458	* Expired October 19, 2019
JP3529395	* Expired October 23, 2012
JP3534710	* Expired March 13, 2016
JP3563346	* Expired April 16, 2018
JP3588460	* Expired March 27, 2012
JP3615685	* Expired April 6, 2020
JP3643835	* Expired March 26, 2013
JP3646110	* Expired May 30, 2017

## Panasonic Holdings Corporation

JP3646113	* Expired September 1, 2017
JP3677018	* Expired May 30, 2017
JP3724070	* Expired August 2, 2016
JP3754999	* Expired December 9, 2017
JP3779311	* Expired February 26, 2018
JP3829141	* Expired March 27, 2012
JP3869839	* Expired March 27, 2012
JP3881679	* Expired March 25, 2014
JP3881680	* Expired September 24, 2013
JP3958249	* Expired December 5, 2017
JP3958250	* Expired December 5, 2017
JP3965207	* Expired February 28, 2023
JP3987526	* Expired March 26, 2013
JP4006357	* Expired December 5, 2017
JP4028641	* Expired September 24, 2018
JP4042745	* Expired July 16, 2023
JP4044077	* Expired March 23, 2019
JP4065014	* Expired December 6, 2015
JP4135252	* Expired March 23, 2019
JP4189017	* Expired December 5, 2017
JP4257090	* Expired September 30, 2022
JP4369990	* Expired July 27, 2020
JP4410307	* Expired July 27, 2020
JP4744625	* Expired July 27, 2020

## Panasonic Holdings Corporation / Nippon Hoso Kyokai

JP3083159	* Expired June 30, 2018
JP4057603	* Expired June 30, 2018
JP4197568	* Expired June 30, 2018
JP4197690	* Expired June 30, 2018

JP2829159	* Expired September 10, 2011
JP2852295	* Expired May 26, 2017
JP2883866	* Expired April 21, 2017
JP2963895	* Expired July 6, 2018

### Sanyo Electric Co., Ltd.

JP3108392	* Expired October 1, 2017
JP3481107	* Expired December 4, 2017

### Sharp Corporation

•	
JP2945569	* Expired October 27, 2013
JP2981448	* Expired October 27, 2013
JP3256434	* Expired March 29, 2016
JP3518739	* Expired January 30, 2015
JP3524706	* Expired December 16, 2016
JP3544165	* Expired March 22, 2020
JP3590511	* Expired November 21, 2017
JP3659776	* Expired September 24, 2017
JP3708028	* Expired May 30, 2021
JP3714886	* Expired April 24, 2021
JP3720347	* Expired April 13, 2024
JP3720722	* Expired March 7, 2021
JP3775937	* Expired March 18, 2019
JP3824833	* Expired February 21, 2020
JP3842959	* Expired June 21, 2020
JP4129408	* Expired April 16, 2023
JP4137613	* Expired December 3, 2022

#### Sony Group Corporation

JP3077467	* Expired October 8, 2013
JP3082820	* Expired November 25, 2013

## Sony Group Corporation

JP3114339	* Expired March 13, 2012
JP3125787	* Expired December 28, 2015
JP3127920	* Expired December 25, 2015
JP3250333	* Expired August 27, 2013
JP3252706	* Expired May 16, 2016
JP3381164	* Expired August 27, 2013
JP3381165	* Expired August 27, 2013
JP3407712	* Expired May 16, 2016
JP3417406	* Expired January 27, 2012
JP3564698	* Expired March 10, 2015
JP3570402	* Expired August 27, 2013
JP3610973	* Expired May 22, 2015
JP3613865	* Expired December 7, 2015
JP3617115	* Expired March 31, 2015
JP3630441	* Expired October 29, 2013
JP3644455	* Expired September 29, 2014
JP3658919	* Expired April 15, 2017
JP3666093	* Expired December 25, 2015
JP3689895	* Expired July 28, 2015
JP3712063	* Expired March 28, 2015
JP3823492	* Expired November 18, 2017
JP3835655	* Expired June 9, 2018
JP3844527	* Expired May 31, 2015
JP3864514	* Expired September 22, 2017
JP3901179	* Expired October 8, 2012
JP3975473	* Expired March 25, 2018
JP4046873	* Expired November 16, 2018
JP4081780	* Expired April 30, 2018
JP4135241	* Expired December 18, 2018

JP3971346

#### Sony Group Corporation / Nippon Hoso Kyokai JP3940541 \* Expired February 25, 2020 Sony Group Corporation / Toshiba Corporation / Nippon Hoso Kyokai JP2975932 \* Expired July 9, 2018 The Trustees of Columbia University in the City of New York JP4194240 \* Expired January 29, 2019 JP4393591 \* Expired February 13, 2018 Toshiba Corporation JP2941398 \* Expired September 29, 2010 JP3435277 \* Expired January 30, 2016 JP3474510 \* Expired February 29, 2020 JP3602768 \* Expired April 12, 2020 JP3824574 \* Expired February 29, 2020

- JP3824575 \* Expired February 29, 2020 JP3917611 \* Expired April 12, 2020
  - \* Expired June 16, 2023