

# IPR reporting dataを見つめる

5JW 飯星 陽平

# 公式の分析ツール

Microsoft Power BI

app.powerbi.com/view?r=eyJrIjoiNjE3YmZlYTktMGZhYi00YmRlTk2N2EtMTczMzFkMjMwMGRkliwidCI6ImU2NzQ2YWl1

Import bookmarks... Finish

### Normalized patents details

ETSI

IPR declaration date (signature)  
IPR\_SIGNATURE\_DATE  
1/1/1900 2/5/2026 All

Declarant company name  
COMP\_LEGAL\_NAME

Number of Patents by Companies and Normalization

Normalization: Error (Blue), No (Dark Blue), Yes (Orange)

The chart displays the total number of patents (70K) for various companies, broken down by normalization status. The companies listed on the x-axis are: Qualcomm Incorporated, Huawei Technologies Co., Ltd, LG Electronics Inc, Samsung Electronics Co., LTD, Guangdong OPPO Mobile Telecommunications Co., ZTE Corporation, InterDigital Technology Corp, Apple Inc, Nokia Corporation, Sharp Corporation, Intel Corporation, Motorola Mobility Inc, Sun Patent Trust, MOTOROLA Inc, and WILLES INSTITUTE OF STANDARDS AND TECHNOLOGY.

Company	Normalization	Count	Percentage
Qualcomm Incorporated	Error	13K	19%
Qualcomm Incorporated	No	53K	77%
Huawei Technologies Co., Ltd	No	39K	90%
Huawei Technologies Co., Ltd	Yes	6K	15%
LG Electronics Inc	No	30K	83%
LG Electronics Inc	Yes	8K	15%
Samsung Electronics Co., LTD	No	32K	95%
Samsung Electronics Co., LTD	Yes	2K	5%
Guangdong OPPO Mobile Telecommunications Co.,	No	25K	98%
Guangdong OPPO Mobile Telecommunications Co.,	Yes	2K	2%
ZTE Corporation	No	19K	95%
ZTE Corporation	Yes	1K	5%
InterDigital Technology Corp	No	14K	82%
InterDigital Technology Corp	Yes	3K	18%
Apple Inc	No	11K	76%
Apple Inc	Yes	3K	24%
Nokia Corporation	No	11K	83%
Nokia Corporation	Yes	2K	17%
Sharp Corporation	No	10K	79%
Sharp Corporation	Yes	3K	21%
Intel Corporation	No	9K	71%
Intel Corporation	Yes	3K	29%
Motorola Mobility Inc	No	2K	14%
Motorola Mobility Inc	Yes	1K	86%
Sun Patent Trust	No	1K	14%
Sun Patent Trust	Yes	1K	86%
MOTOROLA Inc	No	1K	14%
MOTOROLA Inc	Yes	1K	86%
WILLES INSTITUTE OF STANDARDS AND TECHNOLOGY	No	1K	14%
WILLES INSTITUTE OF STANDARDS AND TECHNOLOGY	Yes	1K	86%

Companies

47%

ETSI Power BI reportから、企業毎の宣言数が確認可能である。

# IPR reporting dataにおける各レコードの内容

IPRD_ID	2381	WOIT_REFERENCE	RTS/TSGR-0236300vc40	Illustrative_Part	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6, 10.1.2.8.1
IPRD_REFERENCE	ISLD-201608-010	WOIT_VERSION	12.4.0	DIPG_PATF_ID	20438
IPRD_SIGNATURE_DATE	2016/8/31	3GPP_Type	TS	Original_Application_Number	-1
Reflected_Date	2016/10/6	TGPP_NUMBER	36.3	Original_Publication_Number	-1
COMP_LEGAL_NAME	NTT DOCOMO INC	TGPV_VERSION	12.4.0	Explicitely_Disclosed	1
DECL_IS_PROP_FLAG	1	Patent_Type	Family Member	Normalized_Patent	1
LICD_DEC_PREP_TO_GRANT_FLAG	1	PATT_APPLICATION_NUMBER	CN2013832490	2G	0
LICD_REC_CONDI_FLAG	1	PUBL_NUMBER	CN104396293 A	3G	0
DIPG_ID	43483	PBPA_TITLEEN	Radio communication system and base station	4G	1
DIPG_DISPLAY_NUMBER	1	PBPA_PRIORITY_NUMBERS	JP20120140900 WO201301563391	5G	0
DIPG_EXTERNAL_ID	-1	Country_Of_Registratio	CN CHINA		
Standard	TS 136 300 (RTS/TSGR-0236300vc40) version 12.4.0 -- 3GPP TS 36.300 version 12.4.0	PBPA_APP_DATE	2013/5/14		
Ess_To_Standard	1	ETPR_ID	876		
WI_Type	TS	ETPR_ACRONYM	3GPP-Release-12   GSM Phase 2+ and UMTS/LTE/LTE-Advanced release 12		
WOIT_ETSI_DELIVERABLE_NUMBER	136 300	Ess_To_Project	1		

IPR宣言の番号 (IPRD\_REFERENCE)、特許文献の番号 (PUBL\_NUMBER)、優先権を主張している文献番号 (PBPA\_PRIORITY\_NUMBERS) なども確認可能。

# 分析の基準を考える

IPRD_ID	2381	2381	2381	2381
IPRD_REFERENCE	ISLD-201608-010	ISLD-201608-010	ISLD-201608-010	ISLD-201608-010
IPRD_SIGNATURE_DATE	2016-08-31	2016-08-31	2016-08-31	2016-08-31
COMP_LEGAL_NAME	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC
DIPG_ID	43483	43483	43483	43483
Patent_Type	Family Member	Family Member	Basis Patent	Family Member
PATT_APPLICATION_NUMBER	CN2013832490	WO2013JP63391	JP20120140900	US201314406757
PUBL_NUMBER	CN104396293 A	WO2013190929 A1	JP2014007500 A   JP5758352 B2	US2015172963 A1   US9344922 B2
PBPA_PRIORITY_NUMBERS	JP20120140900 WO2013JP63391	JP20120140900	JP20120140900	JP20120140900 WO2013JP63391
Country_Of_Registration	CN CHINA	WO Patent Cooperation Treaty	JP JAPAN	US UNITED STATES
PBPA_APP_DATE	2013-05-14	2013-05-14	2012-06-22	2013-05-14
ETPR_ID	876	876	876	876
DIPG_PATF_ID	20438	20438	20438	20438

DIPG\_ID (IPRデータベースにおける開示特許グループの一意の数値識別子) を基準に、分析する。(宣言書の付属書における1つの開示「ブロック」に対応する。)

# IPR INFORMATION STATEMENT AND LICENSING DECLARATIONの内容

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ISLD-201608-010.pdf

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2 of 8 110%

Page 2 (version 11)  
IPR Declaration reference ISLD-201608-010



STANDARD, TECHNICAL SPECIFICATION or ETSI Work Item				Proprietor	Application No.	Publication No.	Patent/Application Title	Country of registration	FURTHER INFORMATION		
Project or Standard name	Work Item or Standard No.	Illustrative Specific part of the standard (e.g. Section)	Version (V.X.X.X)						Other members of this PATENT FAMILY, if any *	Application No.	Publication No.
3GPP-Release-12	TS 136 300	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6, 10.1.2.8.1	12.4.0	NTT DOCOMO, INC.	JP20120140900	JP5758352 B2	RADIO COMMUNICATION SYSTEM AND BASE STATION	JAPAN	CN2013832490	CN104396293 A	CHINA
	TS 36.300	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6, 10.1.2.8.1	12.4.0						US201314406757	US9344922 B2	UNITED STATES
									WO2013JP63391	WO2013190929 A1	Patent Cooperation Treaty
3GPP-Release-12	TS 136 300	Section 4, 7.6, 8.2, 10.1.2.8.1	12.4.0	NTT DOCOMO, INC.	JP20120150810	JP5758354 B2	WIRELESS COMMUNICATION SYSTEM	JAPAN	CN2013835393	CN104429157 A	CHINA
	TS 136 331		12.4.1						EP20130813298	EP2871913 A4	European Patent Office
	TS 36.300		12.4.0						KR20147036387	KR20150029652 A	KOREA (REPUBLIC OF)
	TS 36.331		12.4.1						US201314408818	US2015156802 A1	UNITED STATES
									WO2013JP63537	WO2014006982 A1	Patent Cooperation Treaty
3GPP-Release-12	TS 136 300		12.4.0	NTT DOCOMO, INC.	JP20120140899	JP5758351 B2	RADIO	JAPAN	CA20132873687	CA2873687 A1	CANADA

ISLD-201608-010という宣言を実際に確認する。

# 分析の基準を考える

IPRD_ID	2381	2381	2381	4213	4301	4252	4252	4213
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COMP_LEGAL_NAME	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC
DIPG_ID	43483	43483	43483	83279	90289	87420	87420	83279
PATT_APPLICA-TION_NUMBER	WO2013JP6339 CN2013832490 1	JP20120140900	JP20120140900	JP20120140900	US20131440675 7	WO2013JP6339 1	CN2013832490	
PUBL_NUMBER	WO2013190929 CN104396293 A A1	JP2014007500 A   JP5758352 B2	JP2014007500 A   JP5758352 B2	JP2014007500 A   JP5758352 B2	US2015172963 A1   US9344922 B2	WO2013190929 A1	CN104396293 A	
PBPA_TITLEEN	Radio communication system and base station	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	RADIO COMMUNICATI ON SYSTEM AND BASE STATION	Radio communication system and base station
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Country_Of_Re-gistration	WO Patent Cooperation Treaty	CN CHINA	JP JAPAN	JP JAPAN	JP JAPAN	US UNITED STATES	WO Patent Cooperation Treaty	CN CHINA
ETPR_ID	876	876	876	1228	1228	1228	1228	1228
Illustrative_Part	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6,	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6,	Section 4.9, 6.1.2.2, 6.1.3.2, 6.5, 7.6,	-1	Section 10.2.1	-1	-1	-1
DIPG_PATF_ID	20438	20438	20438	20438	20438	20438	20438	20438

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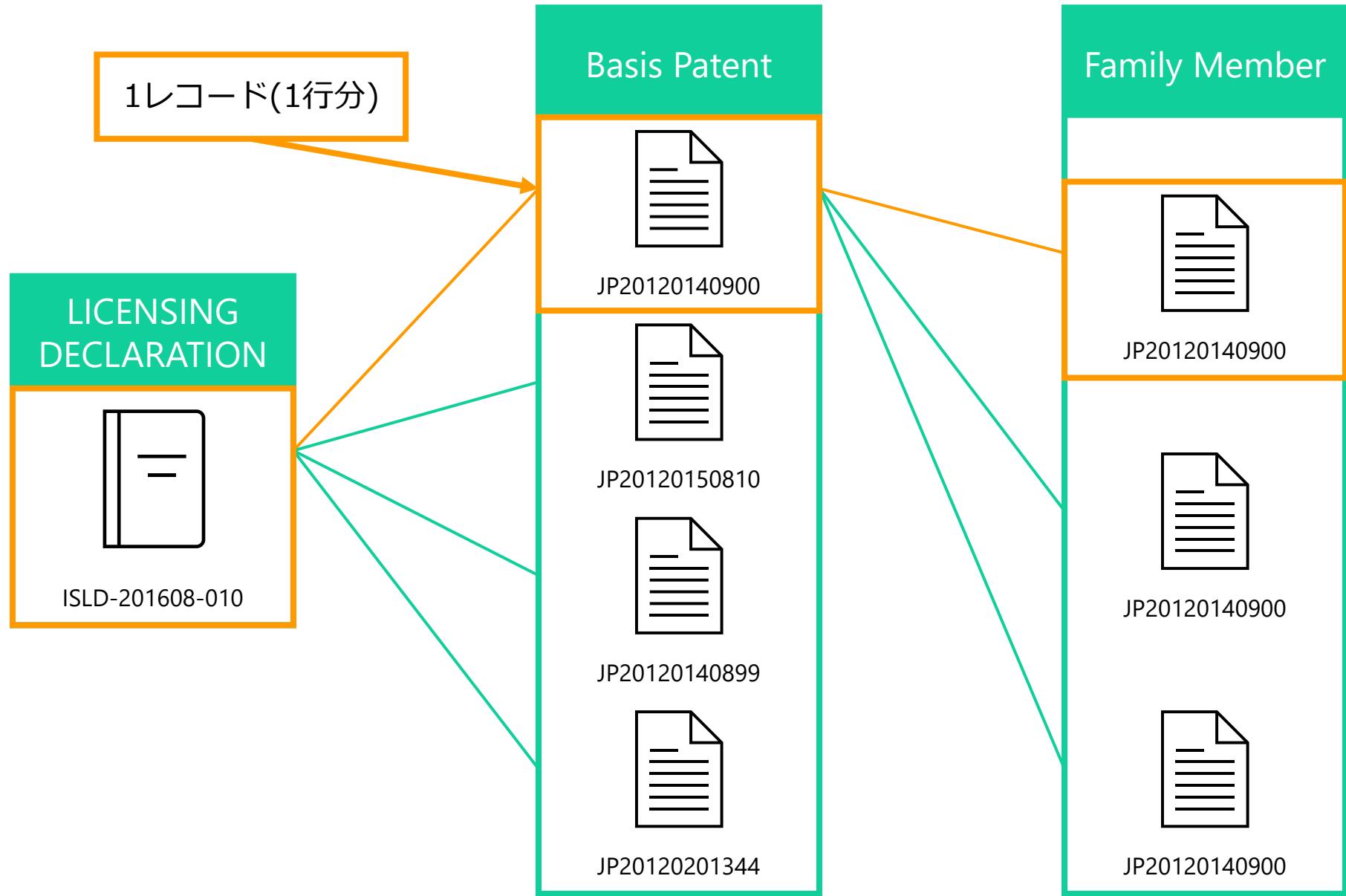
# 分析の基準を考える

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COMP_LEGAL_NAME	NTT DOCOMO INC	NTT DOCOMO INC	NTT DOCOMO INC					
DIPG_ID	83279	83279	90289	90289	87420	43483	87420	90289
PATT_APPLICA-TION_NUMBER	US20131440675 7	WO2013JP6339 1	US20131440675 7	WO2013JP6339 1	JP20120140900	US20131440675 7	CN2013832490	CN2013832490
PUBL_NUMBER	US2015172963 A1   US9344922 B2	WO2013190929 A1	US2015172963 B2	WO2013190929 A1	JP2014007500 A   JP5758352 B2	US2015172963 A1   US9344922 B2	CN104396293 A	CN104396293 A
PBPA_TITLEEN	RADIO COMMUNICATI-ON SYSTEM AND BASE STATION	Radio communication system and base station	Radio communication system and base station					
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Country_Of_Re-gistration	US UNITED STATES	WO Patent Cooperation Treaty	US UNITED STATES	WO Patent Cooperation Treaty	JP JAPAN	US UNITED STATES	CN CHINA	CN CHINA
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Illustrative_Part	-1	-1	Section 10.2.1	Section 10.2.1	-1	10.1.2.8.1	-1	Section 10.2.1
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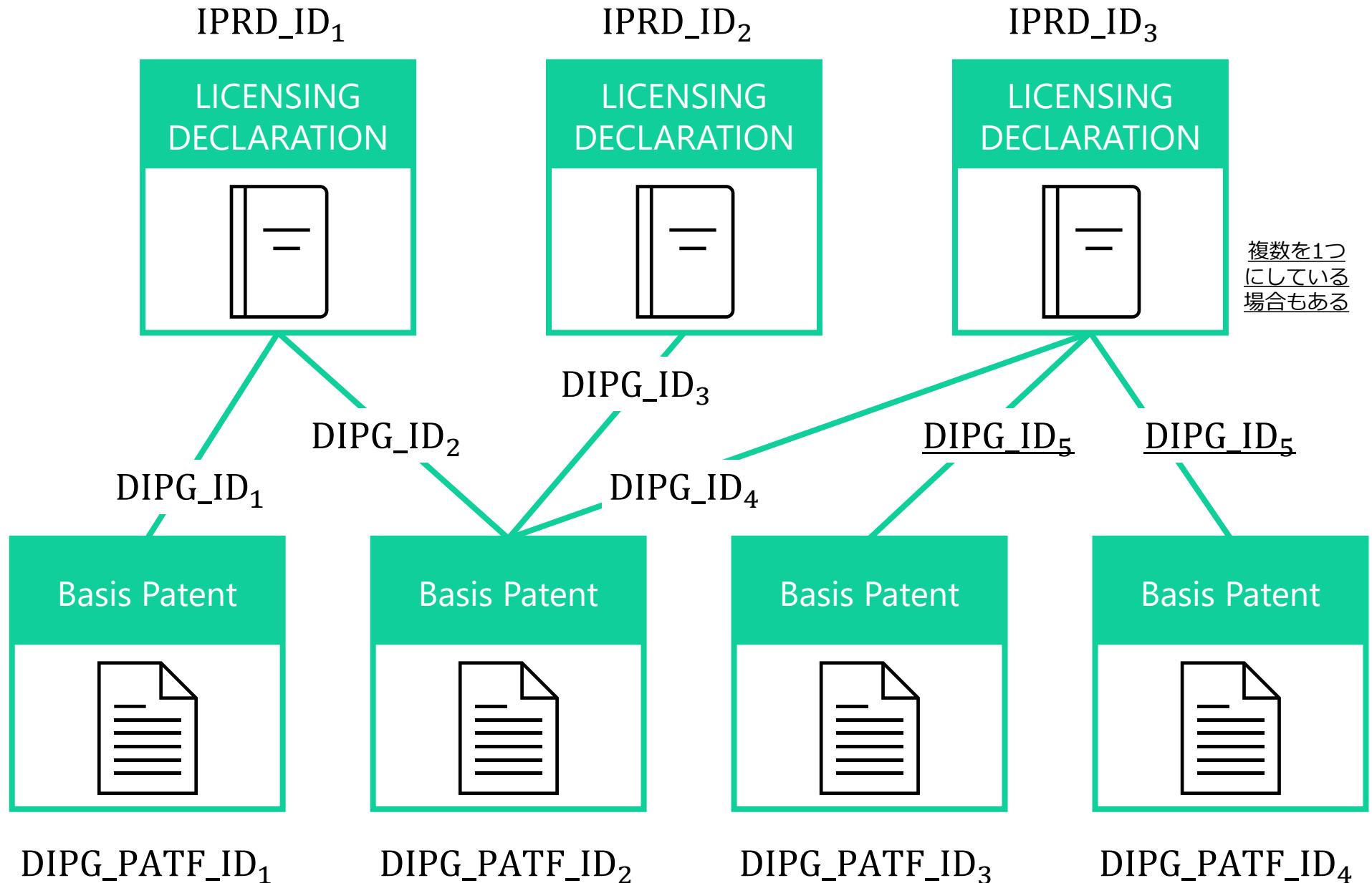
DIPG\_PATF\_ID (IPR データベース内の開示の ETSI 特許ファミリの一意の数値識別子) を基準に、分析する。

# データベースの構造

7



# データベースの構造



# データベースの構造

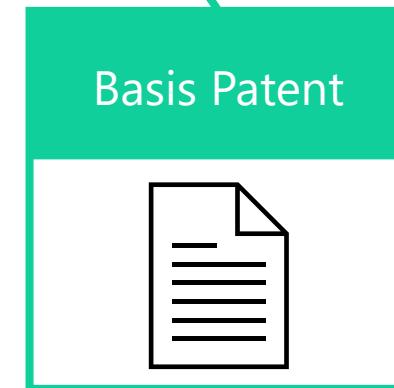
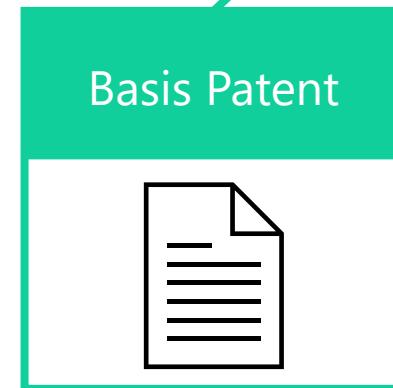
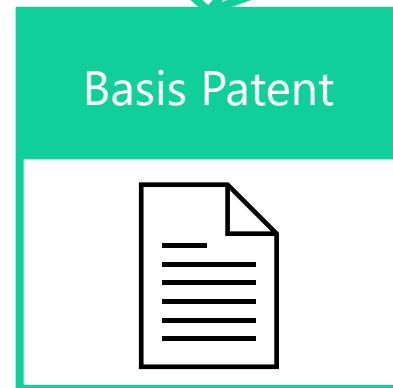
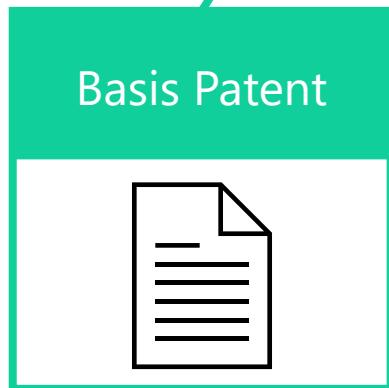
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宣言数



グループ数

ファミリー数



LICENSING  
DECLARATION

LICENSING  
DECLARATION

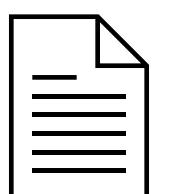
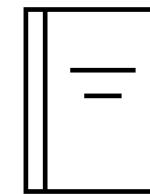
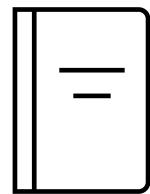
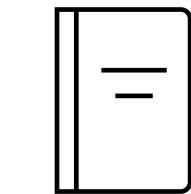
LICENSING  
DECLARATION

Basis Patent

Basis Patent

Basis Patent

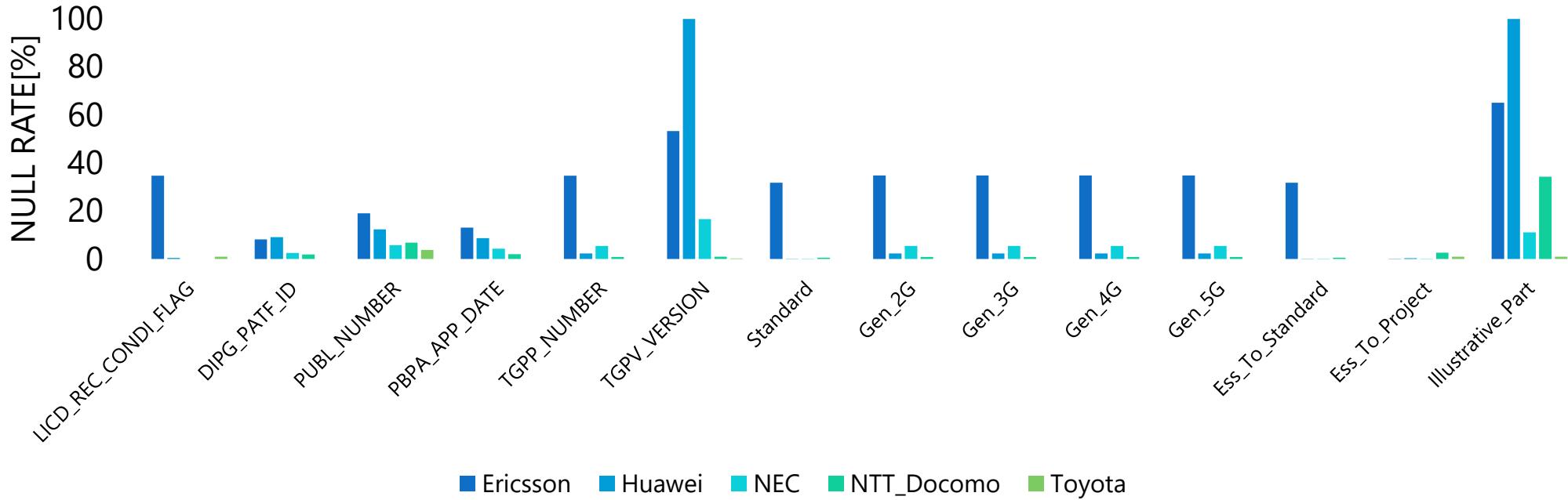
Basis Patent



# データ分析をしよう

# データの信ぴょう性について

11

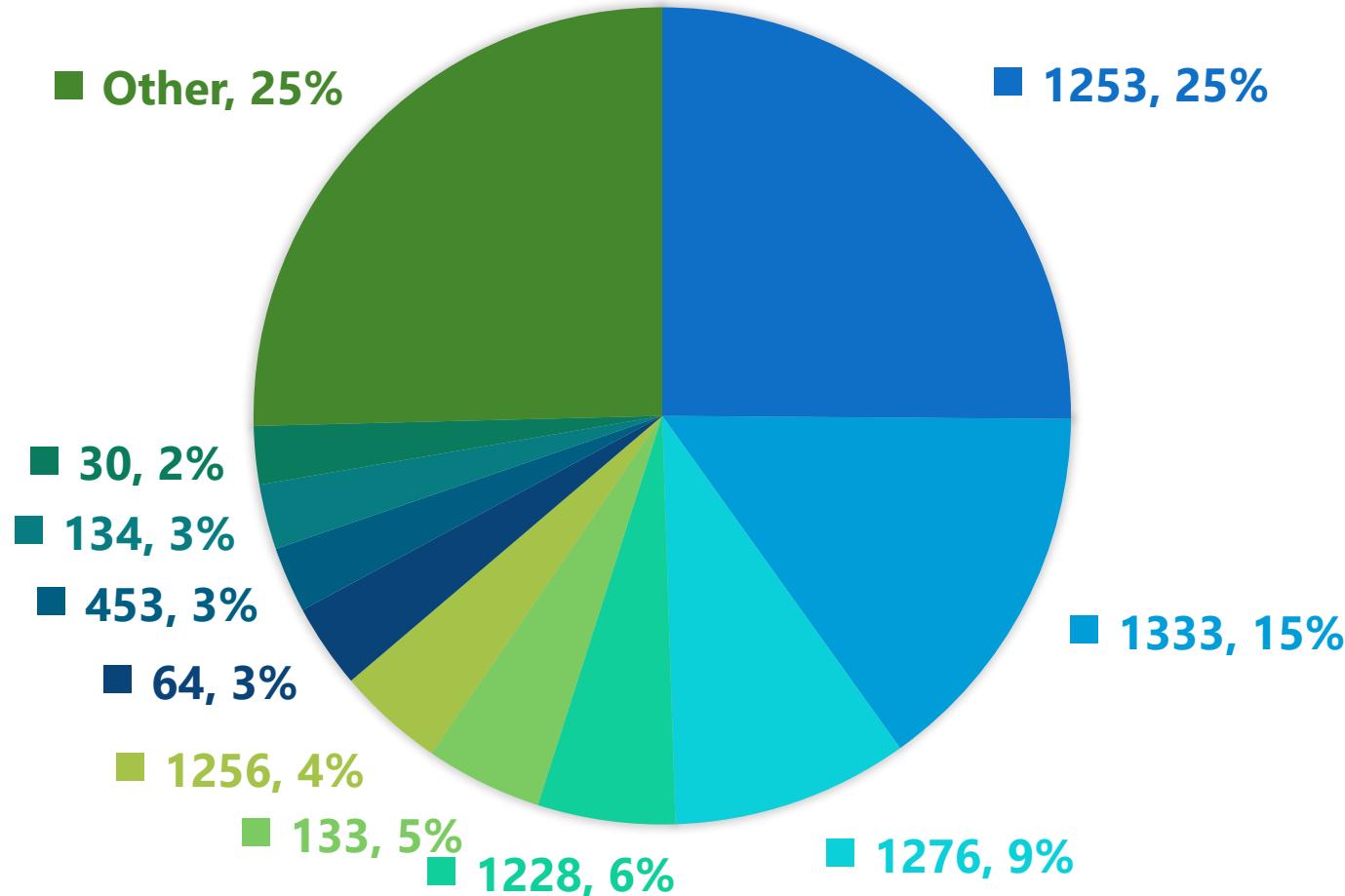


company	LCD_REC_COND_FLAG	DIPG_PATF_ID	PUBL_NUMBER	PBPA_APP_DATE	TGPP_NUMBER	TGPV_VERSION	Standard	Gen_2G	Gen_3G	Gen_4G	Gen_5G	Ess_To_Standard	Ess_To_Project	Illustrative_Part
Ericsson	34.68	8.13	19.04	13.09	34.67	53.16	31.74	34.74	34.74	34.74	34.74	31.74	0.02	64.95
Huawei	0.39	9.04	12.27	8.69	2.26	99.81	0.08	2.28	2.28	2.28	2.28	0.08	0.32	99.85
NEC	0	2.46	5.79	4.25	5.42	16.58	0.03	5.42	5.42	5.42	5.42	0.03	0.01	11.02
NTT Docomo	0	1.84	6.74	1.97	0.81	0.96	0.51	0.84	0.84	0.84	0.84	0.51	2.63	34.27
Toyota	0.97	0	3.73	0	0	0.24	0	0	0	0	0	0	0.97	0.97

企業間によって、データがNULL（未記入）である割合が異なる。

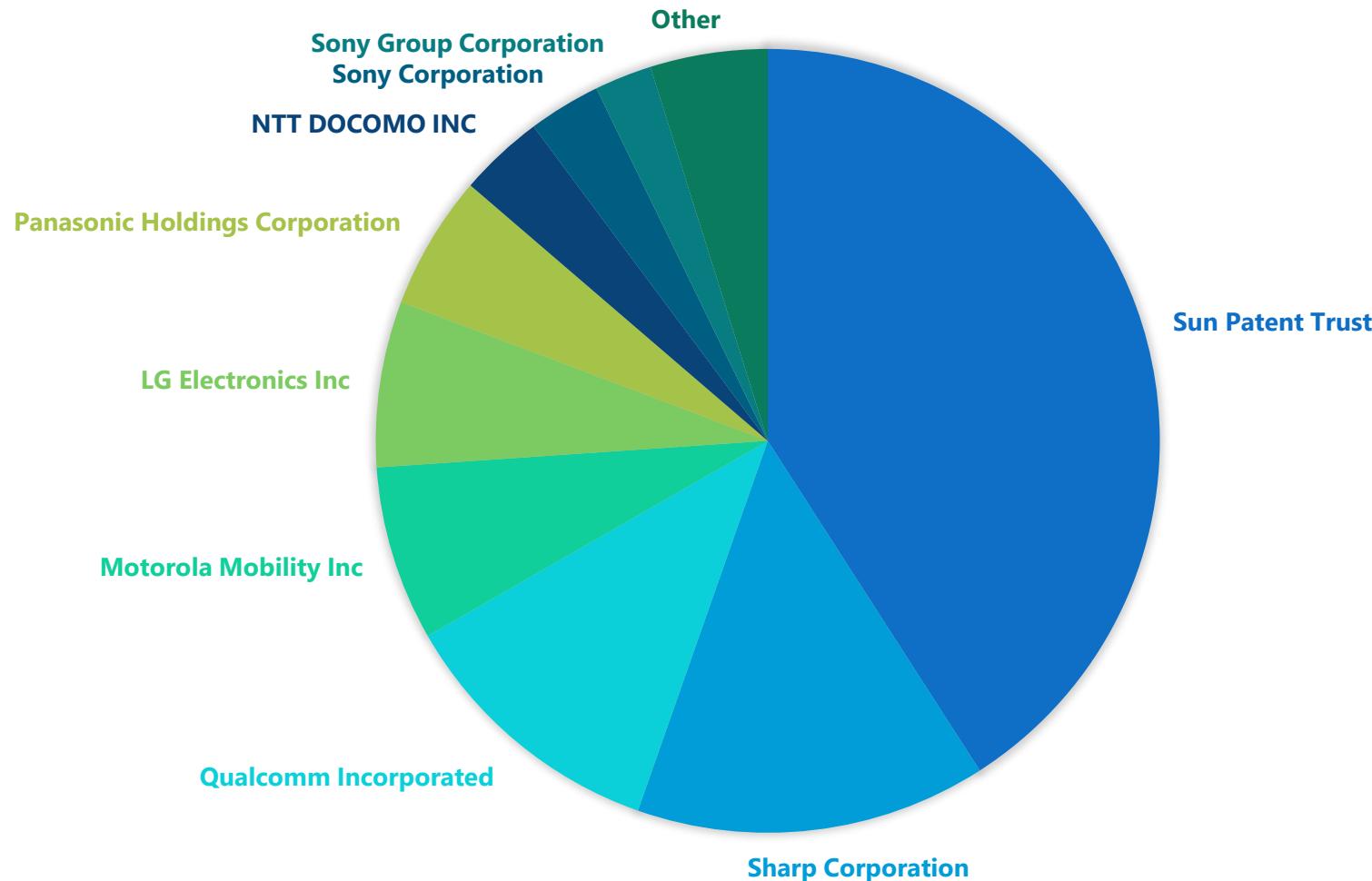


## APPLICATIONS/ETPR\_ID



日本における5Gの出願に占める、ETPR\_IDの割合。

## 3GPP-RELEASE-12 | GSM PHASE 2+ AND UMTS/LTE/LTE-ADVANCED RELEASE 12



3GPP-Release-12 | GSM Phase 2+ and UMTS/LTE/LTE-Advanced release 12に  
関連する宣言をした企業の割合を分析する。 (ETPR\_ID = 876)

- ETSI, [IPR CSV export file](https://docbox.etsi.org/IPR/Open), <https://docbox.etsi.org/IPR/Open>
- ETSI, [ETSI IPR Reporting Solutions](https://help.etsi.org/index.php?title=ETSI_IPR_Reportin),  
[https://help.etsi.org/index.php?title=ETSI\\_IPR\\_Reportin](https://help.etsi.org/index.php?title=ETSI_IPR_Reportin)  
S
- ETSI, [IPR INFORMATION\(ISLD-201608-010\)](https://ipr.etsi.org/IPRDetails.aspx?IPRD_ID=2381&IPRD_TYPE_ID=2&MODE=2),  
[https://ipr.etsi.org/IPRDetails.aspx?IPRD\\_ID=2381&IPRD\\_TYPE\\_ID=2&MODE=2](https://ipr.etsi.org/IPRDetails.aspx?IPRD_ID=2381&IPRD_TYPE_ID=2&MODE=2)