APEX STANDARDS

Standard Essential Patents Integrated Analysis Platform

R&D Intelligence · IPR Strategy · ETSI TS · Section-Level Essentiality · 3GPP TDoc · CR · Historical Construction

Apex Standards SEP Analysis Platform is a space for you to analyze status and relations among patent claims and technical specifications, whether declared standard-essential or not. The Platform provides scientific means to bridge the gap between legal clauses and technical terminology, allowing you to assess the monetary value of your intellectual property so that patenting and standardization can be considered as a whole strategy.
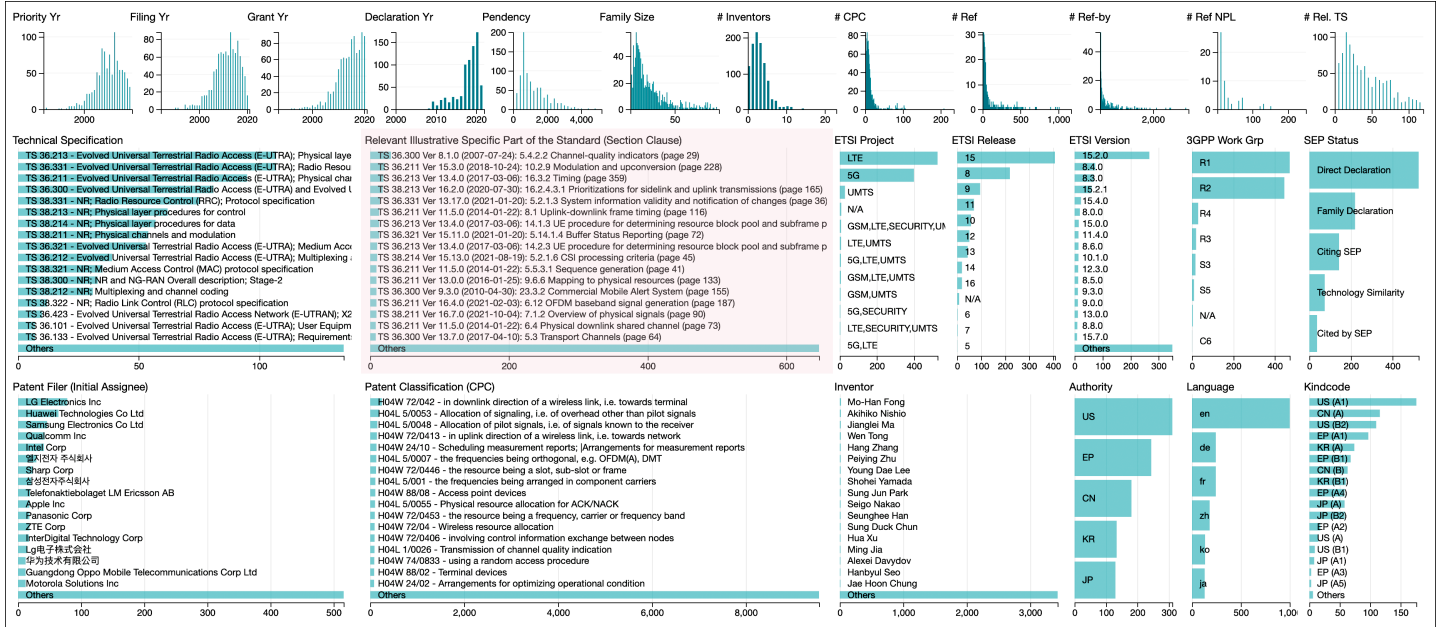
Not lost in translation: while self-declaration of standard relevant patents provides SEP data points, we offer systematic methods for determining mapping between claim elements and technical descriptions of a standard document. Apex Standards SEP Analysis Platform puts things into context, such as:

The knowledge of where your patents stand, relative to competitors' that are similar to your portfolio.

The overview of SEP landscape, dynamically filterable by TS, CPC, assignees, ETSI publication versions, 3GPP TDocs, and, most importantly, "Relevant Illustrative Specific Part of the Standard," or Section Clauses.

The ability to comprehend how your patents relate to other declared SEPs, TDocs, TS, and Section Clauses.

The power to identify and validate more SEPs.

Dashboard charts: Priority Yr, Filing Yr, Grant Yr, Declaration Yr, Pendency, Family Size, # Inventors, # CPC, # Ref, # Ref-by, # Ref NPL, # Rel. TS, Technical Specification, Relevant Illustrative Specific Part of the Standard (Section Clause), ETSI Project, ETSI Release, ETSI Version, 3GPP Work Grp, SEP Status, Patent Filer (Initial Assignee), Patent Classification (CPC), Inventor, Authority, Language, Kindcode.

Hear from Some of Our Most Thoughtful Clientele

A R&D Director:

It offers me with indications to identify patentable topics and subject matter information on a high-level to low-level basis, allowing me to remain vigilant about whether a direction is worth pursuing and enabling my colleagues to work creatively and efficiently.

A Chief IP Officer:

It helps differentiate undervalued patents from those of competitors and see beyond the telecommunications industry, therefore enabling me to deliver crucial insight to my CEO as part of my IPR strategy advisory.

A Licensing Head:

APEX gives my analysts with first-hand data for dissecting our portfolio's high-value patents, enabling them to properly shortlist and find the most defensible inventions to monetize.

Patent	Filer (Assignee at Issue)	Inventor(s)	Title	First Independent Claim	Patent Classification (CPC)	Relevant TS	Relevant Illustrative Specific Part of the Standard (Section Clause)	ETSI Project
CN107580346B 36.300								
CN107580346B Priority: 2011-03-17 Filing: 2012-03-16 Grant: 2021-02-02 Declaration: 2019-12-06	Qualcomm Inc	张晓霞 / 王俊 / Z·刘 / A·加拉 瓦利亚 / 李国 钧 / G·谢里安	(en) Target cell selection for multimedia broadcast multicast service continuity (zh) 针对多媒体广播多播服务连续性的目标小区选择	(en) 1. A method for obtaining a multimedia broadcast/multicast service (MBMS) status of a mobile entity in a cellular wireless communication system, the method comprising: receiving a message from a mobile entity at a base station of the cellular wireless communication system, the message including information for providing to a managing network node for use in charging for MBMS services, wherein the message includes a deregistration message identifying an MBMS service that the mobile entity is deregistering, or a deactivation message identifying an MBMS service that the mobile entity is deactivating; and obtaining the MBMS status of the mobile entity from the message for use by the base station. (zh) 1.一种用于获得蜂窝无线通信系统中的移动实体的多媒体广播/多播服务(MBMS)状态的方法，所述方法包括：在所述蜂窝无线通信系统的基站处从移动实体接收消息，所述消息包括用于提供给管理网络节点以便在MBMS服务计费时使用的信息，其中，所述消息包括标识所述移动实体正在注销的MBMS服务的注销消息、或标识所述移动实体正在去激活的MBMS服务的去激活消息；以及从所述消息获得所述移动实体的MBMS状态以便由所述基站使用。	H04L 12/18 H04W 36/0007 H04W 36/023 H04W 36/08 H04W 4/06 H04W 48/12 H04W 48/20 H04W 60/00 H04W 72/005 H04W 72/1205 H04W 8/205 H04W 88/08	36.300	**TS 36.211 Ver 11.5.0 (2014-01-22): 5.7.3 Baseband signal generation (page 55)** www.etsi.org/deliver/etsi_ts/136200_136299/136211/11.05.00_60/ts_136211v110500p.pdf **TS 38.212 Ver 15.9.0 (2020-07-20): 6.3.2.4.1.3 CSI part 2 (page 67)** www.etsi.org/deliver/etsi_ts/138200_138299/138212/15.09.00_60/ts_138212v150900p.pdf **TS 38.321 Ver 16.1.0 (2020-07-30): 5.4.7 Pre-emptive Buffer Status Reporting (page 58)** www.etsi.org/deliver/etsi_ts/138300_138399/138321/16.01.00_60/ts_138321v160100p.pdf **TS 38.331 Ver 16.5.0 (2021-09-08): 6.3.1a Positioning System information blocks (page 347)** www.etsi.org/deliver/etsi_ts/138300_138399/138331/16.05.00_60/ts_138331v160500p.pdf **TS 38.331 Ver 13.17.0 (2021-01-20): 7.3.1 Timers (Informative) (page 560)** www.etsi.org/deliver/etsi_ts/136300_136399/136331/13.17.00_60/ts_136331v131700p.pdf **TS 36.300 Ver 13.7.0 (2017-04-10): 4.7.4 S1 and X2 control plane aspects (page 41)** www.etsi.org/deliver/etsi_ts/136300_136399/136300/13.07.00_60/ts_136300v130700p.pdf **TS 36.212 Ver 10.4.0 (2012-01-18): 5.2.2.6.4 Channel coding for CQI/PMI information in PUSCH (page 36)** www.etsi.org/deliver/etsi_ts/136200_136299/136212/10.04.00_60/ts_136212v100400p.pdf **TS 38.300 Ver 16.2.0 (2020-07-31): 9.3.3.1 Data Forwarding for the Control Plane (page 90)** www.etsi.org/deliver/etsi_ts/138300_138399/138300/16.02.00_60/ts_138300v160200p.pdf **TS 36.300 Ver 13.7.0 (2017-04-10): 5.2.1a Basic transmission scheme for NB-IoT (page 60)** www.etsi.org/deliver/etsi_ts/136300_136399/136300/13.07.00_60/ts_136300v130700p.pdf	ETSI Project: LTE Release: 10 Version: 10.7.0

Examine section-level essentiality, with direct links to ETSI standard PDF publications.

APEX STANDARDS

Standard Essential Patents Integrated Analysis Platform

R&D Intelligence · IPR Strategy · ETSI TS · Section-Level Essentiality · 3GPP TDoc · CR · Historical Construction

FACT SHEET
April 1, 2022
Page 2/2

A Researcher and Innovator:

When I was doing my job, my greatest fear was when I was creating reports; I was afraid I would overlook something or would not do an excellent job. The research processes that lead to a successful innovation are frequently riddled with trial-and-errors, back-and-forths, and hand annotation of these steps and causes. Often, the software used by cross-departmental colleagues does not speak well together, and as a result, we ended up exchanging plain spreadsheets and wasting time in manual labor, resulting in the numerous sidetracks that diverted my attention away from the initiatives I was originally passionate about.

With APEX, I can assess research directions by asking:

Explorative questions: "What differences do I see if I check a particular TS version, 16.0.3, as APEX hinted?"

Comparative questions: "How does my patent compare to other declared SEPs? What are the similarities and differences? What is the earliest version of a TS, at which point my claim element has the best chance of being mapped to one of its technical clauses?"

Categorizing questions: "If this SEP is declared essential to a base station implementation, can it also be essential to the Open-RAN implementation?"

Cross-referencing questions: "What happens if we further consider TS 34.108, Section 6.11.6.4.1.30, because APEX indicates that <data transfer of reference radio bearer configuration> was defined in TS 34.123, Section 18.3.2.30, which may prove relevant?"

Confirmatory questions: "Is the data I've gathered accurate and complete? Do I follow my instinct this time? Can I trust my memory?"

Perspective questions: "Can we gain a better understanding of another inventor's perspective by looking back on a period when pivotal TDocs were discussed and critical decisions were made?"

Focused questions: "If I need to narrow down my search and focus on a few TS and Sections, how should I prioritize in order to maximize my chances of success?"

Inventive questions: "Can I pinpoint the most relevant TS, TDoc and SEP to support a research idea that my colleagues are trying to help me evaluate?"

Clarifying questions: "Does a company pursue a TDoc under the pretext of owning certain IPs? How do I gain an in-depth understanding about the position of a TDoc contributor? How do I know about the technical merit behind the TDoc in a broader context?"

Due-diligence questions: "Do I ask enough questions or do I settle for what I know? How do I know if my interpretation is limited by confirmation bias? Before using APEX, did I feel secure in telling my manager that the subject is over my head, and here is my best guess... or, did it sound acceptable if I told my manager: it would be costly to sort through the large pile of TS Sections, but we could try to schedule a meeting with another team, and see if they have the answers?"

Philosophical questions: "What would I do differently if I knew I could instantly locate and compare relevant TS, Section, TDoc and SEP?"

By verifying the above questions and receiving immediate feedback from the APEX tool, I am able to develop advanced research skills through questioning and analysis, which collectively motivate me to learn more about each assigned topic, improve my situational awareness, and advance my professional career.

Under fierce 5G and 6G competition, SEP development may appear to be a pompous mission. At its heart, though, it entails extensive subject knowledge, cross-referencing, and repeated checking. With APEX, I can now fully understand the linking of the different types of documents, and cross reference them as necessary. This significantly reduces otherwise missed opportunities, since I can always keep the big picture in mind and do not have to rule out fresh ideas prematurely due to a lack of information.

When something catches my attention, whether it's an epiphany for a new research idea, or the need to verify an argument made by another engineer, it feels good to be able to check it out right away. That is the most noticeable difference after I use APEX.

While the new insight enables me to compare SEP statuses and explore new possibilties, what matters most, is that its UI automatically lays out the logical options based on my search criteria, and documents my thinking processes and analytical steps. Every time I review these steps, I discover new layers of information. As a result, I am able to readily explain the approaches to my supervisor and technical colleagues. This replication capability enables us to create more useful patents, identify any gaps in our inventive processes, and improve our overall standardization efforts. My work has since gained increased recognition for its quality and thoroughness. It's good to know that the APEX tool is there to help when I seek clarity. These, in my opinion, are important components of my credibility and long-term success.

—Like it as a tool, but love it as an inventive machine—

Apex Standards Expedite Innovation.
To know more, contact:
support@apexstandards.com

See the complete reference network among patents, TDocs, TS and section clauses

Legend:
- EVOLVED WIRELESS LLC (14 patents)
- OPTIS WIRELESS TECHNOLOGY LLC (6 patents)
- HUAWEI TECHNOLOGIES CO LTD (6 patents)
- PANASONIC CORPORATION (4 patents)
- SHARP KABUSHIKI KAISHA (2 patents)
- FUJITSU LIMITED (1 patent)
- INTERDIGITAL TECHNOLOGY CORPORATION (1 patent)

- Internal Patent Reference
- External Patent Reference
- Patent to 3GPP TDoc Reference
- 3GPP TDoc to 3GPP TDoc Reference
- Patent to ETSI TS Essentiality Declaration

See what patents reference R1-060046 (NTT DoCoMo)

See the network originating from US-8,014,361 (InterDigital), which references R1-060387 (Motorola)

and was declared essential to TS 36.211 and 36.321.