

**Standard Essential Patents:
How the IoT and smart meter world
can master this new challenge**



Smart meters, gateways and control devices use communication standards (such as WiFi and 5G) for system integration. These communication standards are based on technology that is often patented. As a result, a licence market worth billions has developed for patent holders of mobile communication standards: Large patent holders and patent developers have already discovered the smart grid as a source of income and have started to demand licence payments from device manufacturers and infrastructure operators.

The smart meter manufacturer, the radio module supplier (and sub-suppliers), the smart meter retailer and the commercial user (such as a municipal utility company) are potentially liable for patent infringement. Experience shows that the manufacturers and users of end devices are the primary focus of the patent holders because a higher licence fee can be demanded here considering the end sales price. It can be assumed that the patent holders will also turn to other market participants. A claim for injunctive relief from a patent holder can cause considerable economic damage.

Standard essential patents

Patent proprietors file their patent applications during and after the standardisation process with the aim of including as much patented technology as possible as part of a standard therefore making the use of the standard dependent on the patented technical solution being used. The patent then becomes "standard essential" (or "SEP" for "standard essential patent"), meaning that the standard cannot be used without utilising the patent. In the last decade, the number of declared SEPs has risen exponentially from 12,191 to 72,300, including many patents with effect in Germany: Regarding the 4G standard, around 57% of SEP-declared patent families had effect in Germany in 2022; in the 5G area, the figure was also more than 50% of patent families.

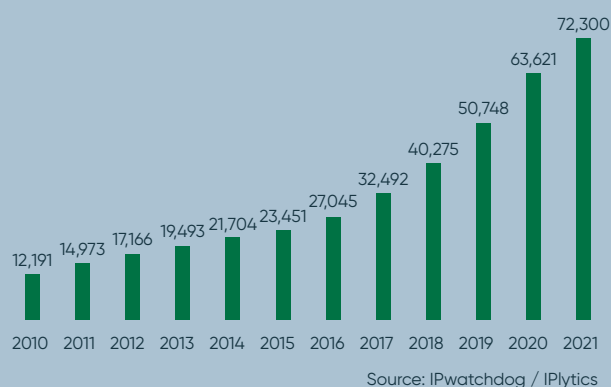
FRAND licence

Patent holders can assert a claim for injunctive relief against the users of their patented technology. In principle, a patent holder is free to choose which (and how many) participants in a commercial supply chain it takes action against for patent infringement.

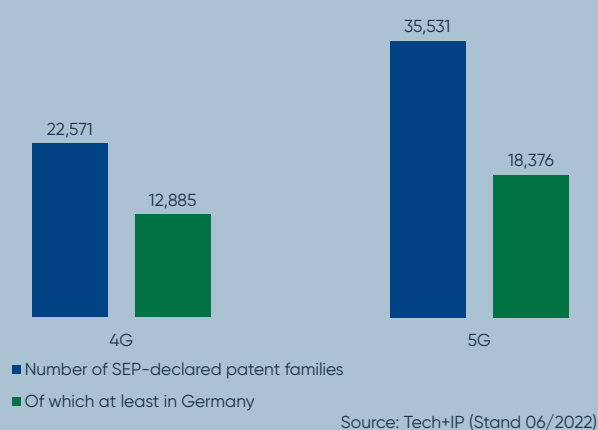
This monopoly and exclusivity for patent owners are justified in cases where there is no standardisation of the patented technology and no conflict with antitrust and competition law exists.

However, with a view to equal access to markets for

Increase in declared SEPs



Number of SEPs of selected standards



standardised technology, case law generally provides the possibility of a so-called compulsory licence defence known as FRAND (Fair, Reasonable and Non-Discriminatory) as a defence against a claim for injunctive relief by the patent proprietor.

Whether and which licence conditions (especially royalty) are in fact FRAND depends on the individual case. Although case law has developed basic principles and rules of conduct for both parties in this regard, this is regularly decided in disputes in and out of court between the patent holder and the implementer.

How can IoT and smart meter companies defend themselves?

Whether the licence fees demanded by SEP holders correspond to the FRAND level owed is rarely determined by courts and usually by negotiation. The implementer is then faced with the decision to accept the possibly excessive offer of the patent holder or to negotiate lower licence fees which may involve a legal dispute.

If a patent holder demands licence fees, the following strategies are available:

1. **Tug of war:** Past judgements show in practice that defence regularly leads to lower licence rates.
2. **FRAND licence:** A licence payment is often ultimately unavoidable, so that an economic contract at FRAND level should be targeted.
3. **Thinking ahead:** A single licence agreement can jeopardise the position of an entire industry. In addition to the "tug of war", there are alternative approaches and solutions, with regard to both the company's own customers and supplier relationships.

The possibility of a "**purchasing group**" for FRAND licences should also be explored. The aim of a purchasing group is to obtain identical or very similar licence conditions for several licensees and to negotiate them collectively – similar to the established alliances on the patent holder side. Most recently, the German Federal Cartel Office tolerated the launch of the "Automotive Licensing Negotiation Group", a cooperation between BMW, Mercedes-Benz, Thyssenkrupp and VW to jointly negotiate conditions for the acquisition of licences to SEPs for general wireless communication technology. Despite this so far unique initiative, a number of legal constraints must be taken into account when organising a purchasing group.

If you have any questions about standard-essential patents, please do not hesitate to contact us.

Selected references

IoT device manufacturer

Defence against several lawsuits filed by a major SEP patent holder

IoT module manufacturer

Licence negotiation and out-of-court defence against large SEP patent holder

Smartphone manufacturer

Licence negotiation and legal defence against major SEP patent holder

Smartphone manufacturer

Defence in and out of court against an SEP assertion entity

Manufacturer of communication modules

Development of a strategy and a contractual framework regarding liability for SEP infringement in supplier relationships

WiFi device manufacturer

Defence against several lawsuits filed by a large SEP patent holder

Standard Essential Patents:
How the IoT and smart meter world
can master this new challenge

Your contact persons



Dr. Dietrich Kamlah
Partner
+49 89 21038-158
d.kamlah@taylorwessing.com



Dr. Thomas Pattloch, LL.M.Eur
Partner
+49 89 21038-222
t.pattloch@taylorwessing.com



Dr. Jan Phillip Rektorschek
Partner
+49 89 21038-463
j.rektorschek@taylorwessing.com



Dr. Christian Lederer
Partner
+49 89 21038-157
c.lederer@taylorwessing.com



Tobias Baus, LL.M., Dipl.-Ing.
Salary Partner
+49 89 21038-411
t.baus@taylorwessing.com



The cooperation with Taylor Wessing was perfect, I really appreciate the efficiency of the law firm in every respect. They were precise, efficient and extremely technical.

Legal 500, Patentrecht, 2024

The lawyers are extraordinarily dedicated. They bend over backwards to give times and consideration and make themselves available.

**Chambers, Intellectual Property:
Patent Litigation, 2024**

Taylor Wessing boasts an extremely strong and collaborative team which has earned an excellent reputation across Europe.

IAM Patent 1000, 2024

The team provides us with excellent interdisciplinary advice. This cooperation across several locations also functions smoothly.

Legal 500, Energiesektor, 2024

The colleagues at Taylor Wessing have in-depth knowledge of the industry and are therefore able to offer customised solutions in the shortest possible time. The collaboration with our in-house colleagues runs smoothly and is always very professional.

Legal 500, Energiesektor, 2022

Energy Sector ★★★★★
Patent Law ★★★★★

JUVE 2023/2024



1200+ lawyers
300+ partners
28 offices
17 jurisdictions

Austria	Klagenfurt Vienna
Belgium	Brussels
China	Beijing Hong Kong Shanghai
Czech Republic	Brno Prague
France	Paris
Germany	Berlin Düsseldorf Frankfurt Hamburg Munich
Hungary	Budapest
Netherlands	Amsterdam Eindhoven
Poland	Warsaw
Republic of Ireland	Dublin
Slovakia	Bratislava
South Korea	Seoul*
UAE	Dubai
Ukraine	Kyiv
United Kingdom	Cambridge Liverpool London London TechFocus
USA	New York Silicon Valley

* In association with DR & AJU LLC

© Taylor Wessing 2024

This publication does not constitute legal advice. The entities operating under the name Taylor Wessing act under a common brand name but are legally independent of each other; they are members of the Taylor Wessing Association or affiliated with such a member. Taylor Wessing itself does not provide legal services. Further information can be found in our legal notice at taylorwessing.com/en/legal/regulatory-information

taylorwessing.com

TaylorWessing