



To Pool or not to Pool?

Taraneh Maghamé
Vice President, Wireless Programs
& Corporate Development

April 20, 2021

Why Discuss Patent Pools?

- “The creation of patent pools or other licensing platforms, within the scope of EU competition law, should be encouraged. They can address many of the SEP licensing challenges by offering better scrutiny on essentiality, more clarity on aggregate licensing fees and one-stop-shop solutions.”
- “The Commission calls on SDOs and SEP holders to develop effective solutions to facilitate the licensing of a large number of implementers in the IoT environment, via patent pools or other licensing platforms, while offering sufficient transparency and predictability.”

Section 2.3 and 2.4 of EC COM (2017) 712 final (November 2017)

<https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-712-F1-EN-MAIN-PART-1.PDF>



Patent Pools...

Facilitate SEP Licensing

Drive the Rapid Development & Adoption of New Technologies

Clear Patent Rights for Complex Technologies

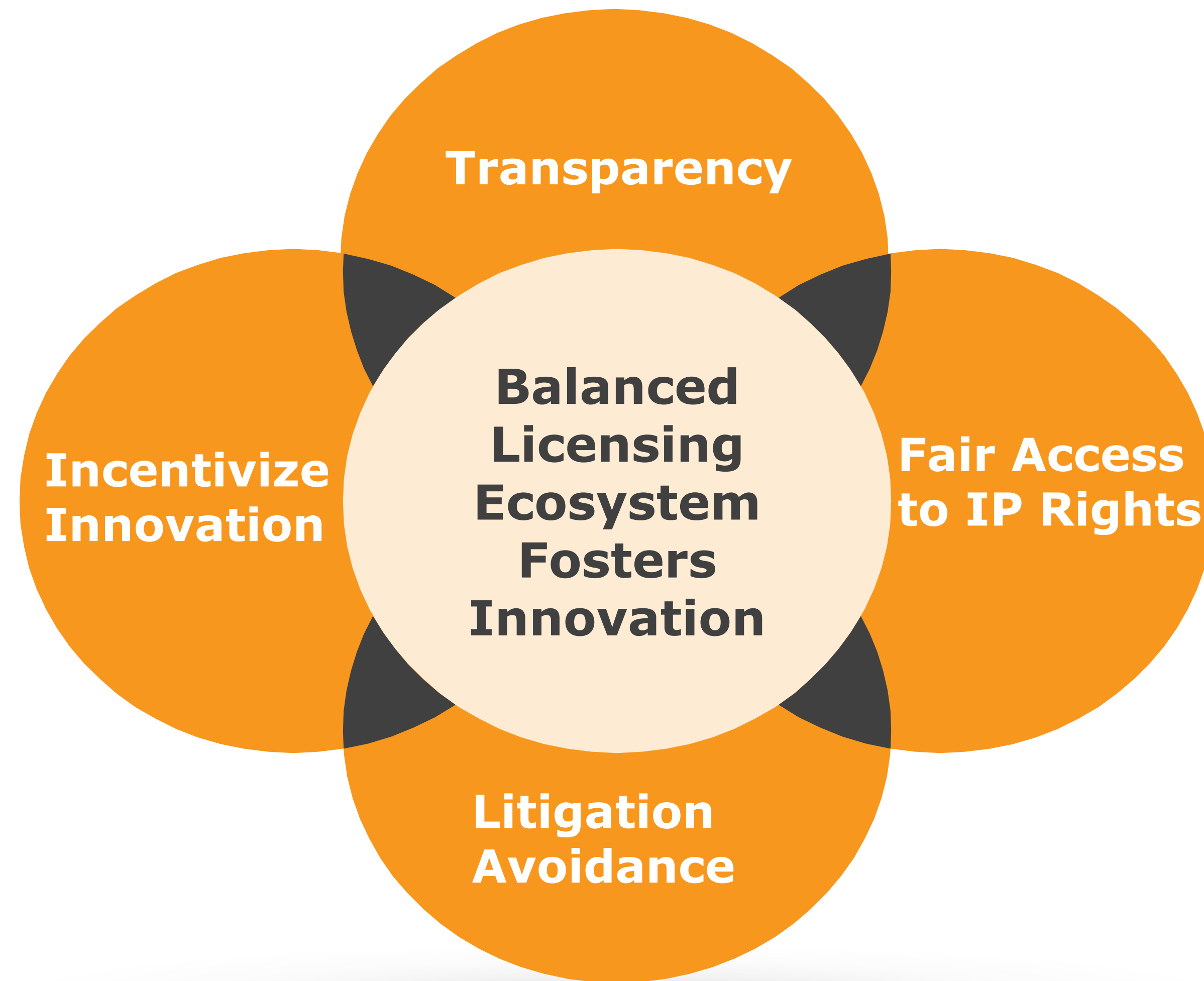
Reduce Transaction Costs

Avoid Costly Litigation

Create an Efficient IP Marketplace



Pools Foster a Fair & Balanced Ecosystem



Resurgence of Patent Pools

Patent Pools – past, present and future...

- How can patent pools *once again* help solve industry challenges:
 - Establish efficient and transparent licensing platforms
 - One-stop-shop: One license covering multiple SEP portfolios
 - Offer enhanced essentiality analyses – independent evaluations
 - Allow true innovators to be fairly and adequately compensated
 - Facilitate widespread (and speedier) adoption of standardized technologies
 - Reduce unnecessary litigation
 - Assure leading innovators continue to contribute their best IP to the SSOs

We all know this, but...

- *What do you need to make a patent pool successful?*
- *Why are patent pools important for SEP licensing in IoT?*

Potential IoT SEP Licensing Bottlenecks

- Diverse range of standards
 - Connectivity is primary focus of discussions, but that's not all
 - Even connectivity function uses different standards (i.e., cellular, Wi-Fi, etc.)
 - Diverse range of products, different price points
 - E.g., Automotive, Smart Home, Services, etc.
 - Larger number of implementers, possibly not experienced in SEP licensing and resource-constrained
 - Need for better transparency and predictability, esp. for SMEs
- *Pools could be a viable alternative to bilateral licensing for most, but will co-exist with bilateral licensing, as always*

Pool Success Factors

- Speed and timing of formation
- Broad participation by industry players – Licensors & Licensees
 - Avoidance of litigation as a “hold-out” or “hold-up” tactic
- Significant portion of market being licensed under pool rates
 - Establishes industry-accepted terms and conditions (rates)
 - Generates revenue for licensors more efficiently
- Benefits over bilateral licensing (e.g., efficiencies, pricing, leveling playing field/non-discrimination)
- Standard terms & conditions reduce competitive advantages/disadvantages



Some Debated Aspects

Efficiency	Non-Discrimination	Enforcement
<ul style="list-style-type: none">• For Licensees• For Licensors• For Industry as a whole	<ul style="list-style-type: none">• Rates• Pursuit of licensees• “Hold-Out” and “Hold-Up”	<ul style="list-style-type: none">• Litigation Reduction• Licensor Actions• Litigation by Pool Administrator

Other important considerations:

- Level of Licensing – need for flexibility
- Interests of Pool Administrator
- Competition Law Issues

Pools in IoT – A Modified Approach?

- Start with existing benefits of patent pool licensing – think further about
- Can SSO's:
 - facilitate formation of pools
 - help establish rates
 - Encourage SEP holders to participate in pools (should there be incentives/penalties?)
- Larger number of stakeholders – Licensors and Licensees
 - New ways of incentivizing licensors to join pools
 - Are Licensee negotiation groups (consortia) feasible? Or would it be a recipe for “hold-out”?
- A multitude of standards
 - Are “pool of pools” possible? To cover multiple standards, at option of licensee



Thank You



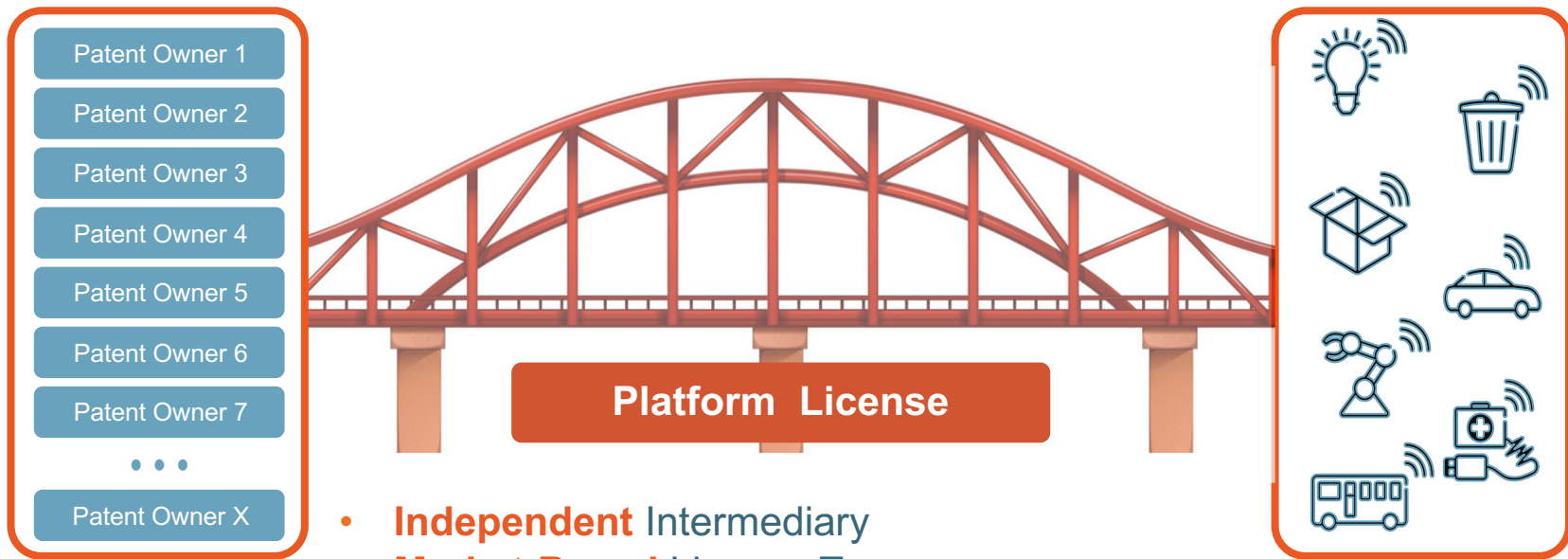
European Commission Webinar

**“How to make patent pools work
for both SEP holders and licensees?”**

April 2021

Laurie Fitzgerald
Senior Vice President, Avanci

PLATFORM SOLUTION



- **Independent** Intermediary
- **Market-Based** License Terms
- Licensing Only **Essential** Patents
- Single Joint License to **Simplify** Licensing
- Royalties that are **Public, Fixed** and the **Same for All**

FINDING COMMON GROUND

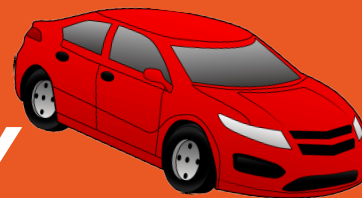
- Practice of **little / no supplier indemnification**
- License agreements signed by **OEM companies**
- License covers **patent portfolio**

**TELECOM
INDUSTRY**



- History of **supplier indemnification**
- License agreements signed by **suppliers**
- License covers **specific patents**

**AUTO
INDUSTRY**



AVANCI PLATFORM PARTICIPANTS

16 AUTOMOTIVE BRANDS



41 PATENT OWNERS





www.avanci.com

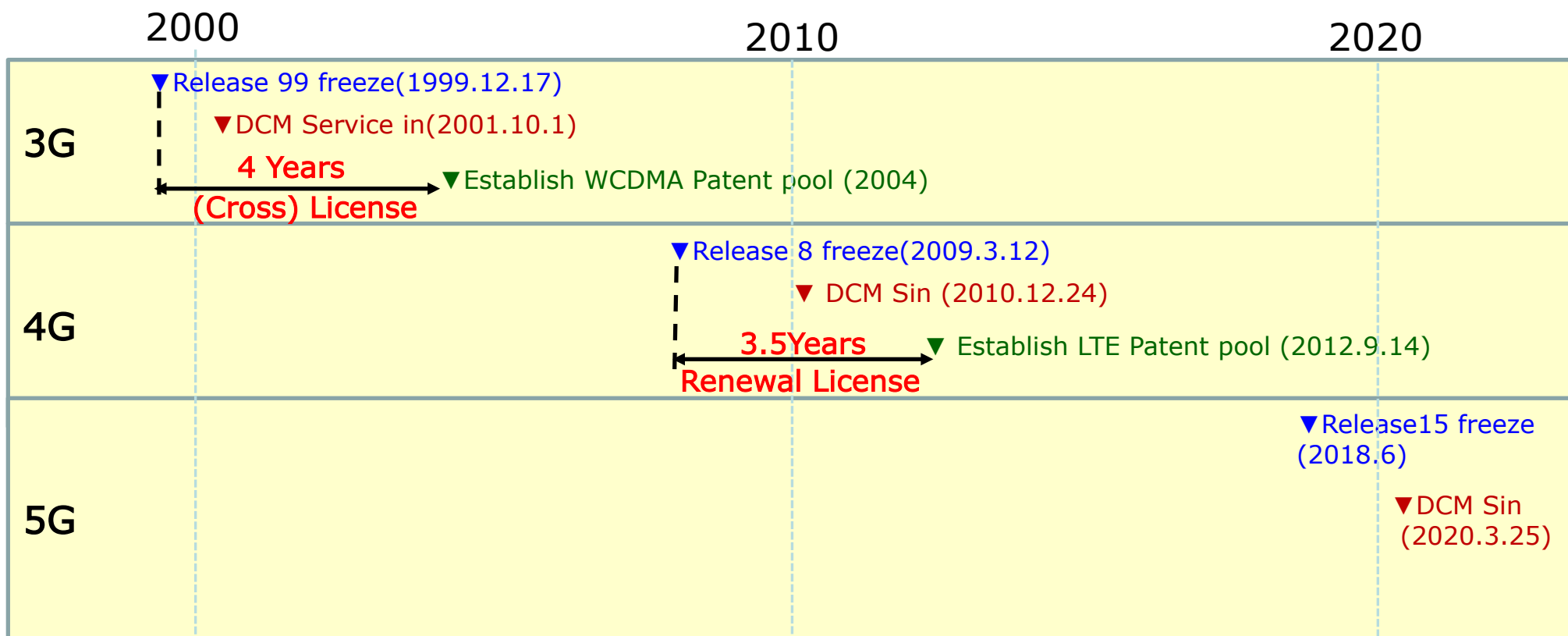
View on Patent Pool

NTT DOCOMO, Inc.

April 20, 2021

- NTT DOCOMO supports patent pool and has been devoting tremendous resources for the success.
- Unfortunately, both WCDMA (3G) and LTE (4G) patent pool were far from “one stop shop” because **the major licensors in this field never licensed their patents through the patent pool.**
- From 2017 to end of 2018, we were exploring the possibility of establishing a patent pool for 5G handsets and exchanging opinion on licensing SEPs to IoT devices with major possible 5G SEP holders.
- Dialogue with major 5G SEP holders led us to the following conclusions:
 - There was **no strong demands for patent pool** for terminals from both large licensors and large implementers.
 - Avanci would be “one stop shop patent pool” for connected cars.
 - It was too early to consider licensing SEPs to the other IoT verticals **because of the market was premature.**

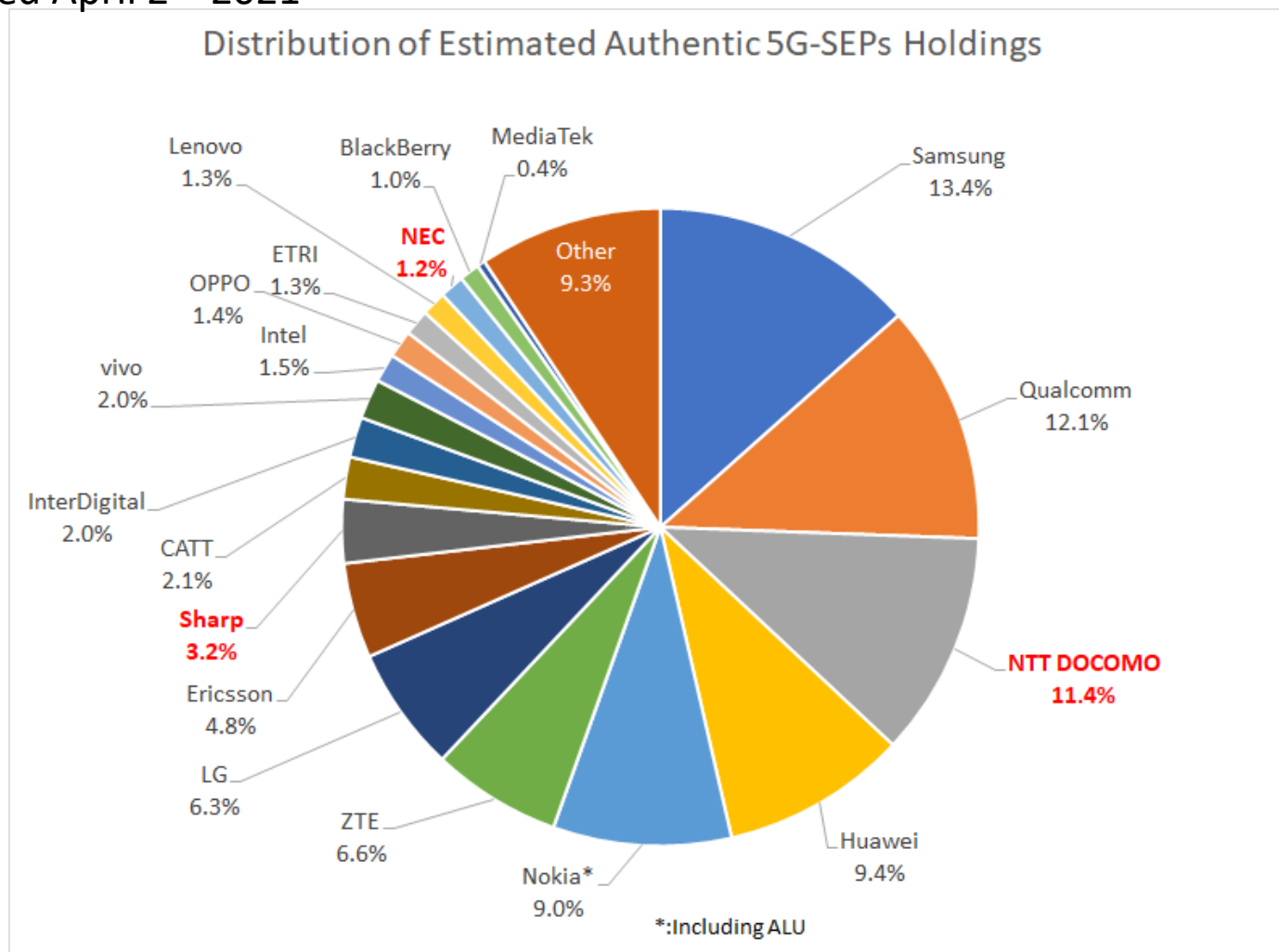
- Little market demands for patent pool **if existing (cross) license agreements already cover the "Licensed Products"**.
- Building a patent pool in a timely manner is one of the keys for its success.



- Patent pool itself is a good framework to increase transparency, fairness while reducing the risk against patent infringement.
- As for DOCOMO, our primary reason for supporting the patent pool is to reduce SEP dispute and securing stable procurement while obtaining fair return on our R&D investment.

5G patent pool need to be supported by Key 5G licensors.

Published April 2nd 2021



<http://www.cybersoken.com/en/topics/2020/10/12/240/>

- *What changes with the IoT for patent pools?*
 - *Many possible licensees might be pure licensees, no cross license is available.*
 - *This situation definitely supports patent pool.*
- *Will patent pools provide easier access to licences for new entrants on the market, in particular SMEs?*
 - *Of course! Because patent pool is fair and transparent*
 - *Are there specific concerns for SMEs? Many licensors typically (and only) contact with large implementers who are making/selling finished products.*

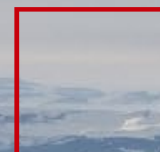
- *How can patent pools be made more attractive for both SEP holders and SEP implementers?*
 - *Constructive negotiation between major SEP holders (and patent administrators) and major implementers might be a solution.*

The new of today, the norm of tomorrow

NTT
docomo

Patent Pool Approach in 5G/IoT Era

Nancy Yu
Director of 5G/IoT IP Policy, Huawei
2021.4.20



Disclaimer: The views, thoughts and opinions expressed in this presentation are those of the speakers and do not necessarily reflect the official policy or position of Huawei Technologies Co., Ltd., any of its affiliates, or other agency, organization, group or individual. The information contained in this presentation is provided on an “as is” basis with no guarantees of completeness, accuracy, usefulness or without any warranties of any kind whatsoever, express or implied.



Leading provider of ICT infrastructure and smart devices



Bring digital to every person, home and organization for a fully connected, intelligent world



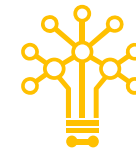
197,000
employees



170+
countries and
regions



53.4%
R&D
employees

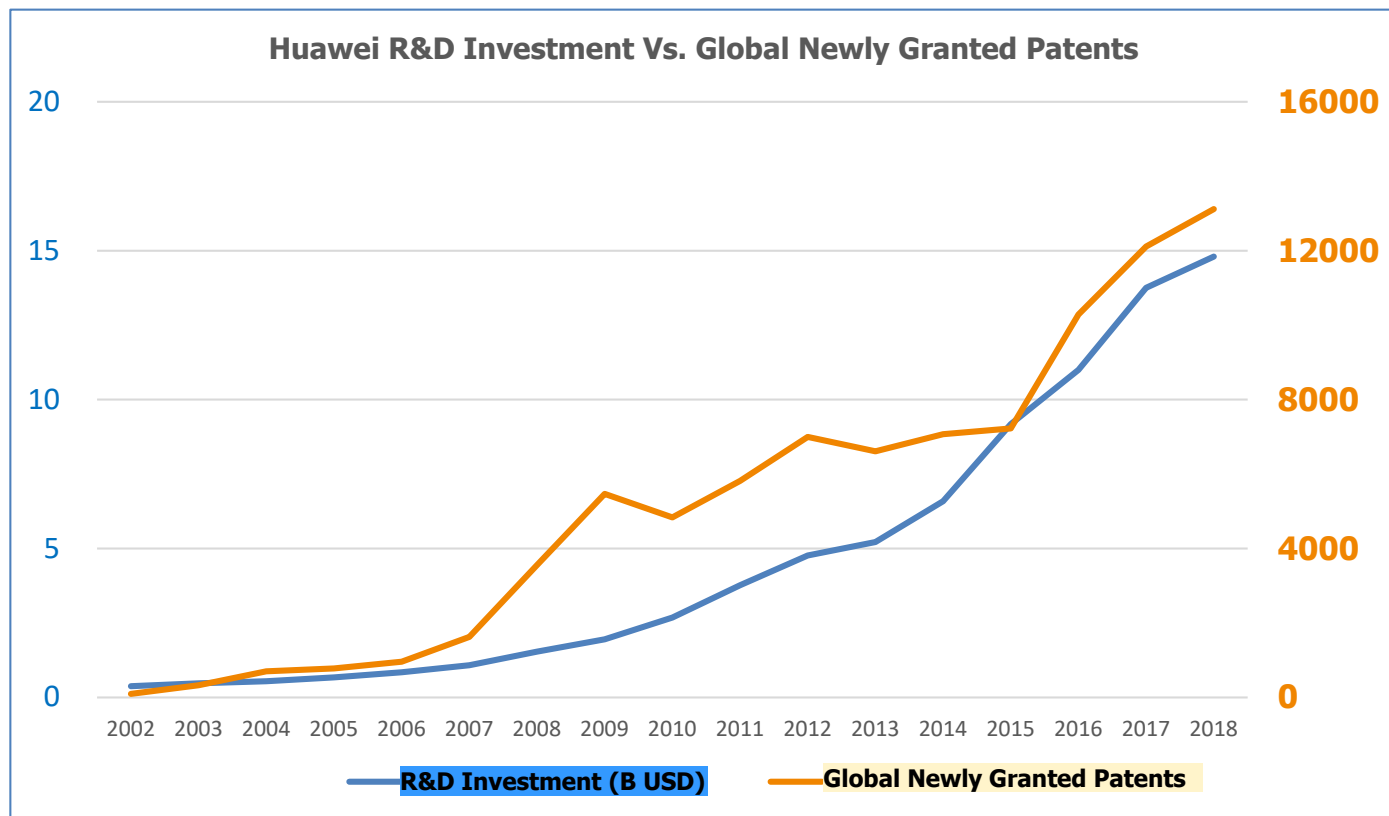


No. 3
in R&D
investment



No. 49
on Global 500

Heavy, sustained investment in R&D



10~15%

Investment percentage of R&D of annual revenue



90B \$

Aggregate investment for R&D for past ten years



100,000+

Total number of granted patents



4B+ \$

5G R&D Investment

The Challenges of SEP Licensing in the 5G/IoT Era

- With 5G/IoT, a much larger number of vertical industries will implement mobile communications standards.
- Connectivity needs and Price of 5G/IoT products will VARY considerably and tremendously (compare needs of self-driving cars vs. those of home appliances or smart meters).
- Given the number of implementers, the number of disputes and litigations will increase and bilateral licensing is more difficult. However, the tolerance to litigation risk (in particular, injunctions) will, however, be very low in many industries.

Patent Pool Approach

- Bilateral Negotiation vs. Pool Licensing?
- Licensor Driven vs. Licensee Driven?
- License to All vs. Access to All?
- One-size-fits-all vs. Tailored to Industry Sectors
- Essentiality Check: The Qualification

Patent Pool in 5G/IoT Era – *one-size-fits all?*

- **Balance the interests of both SEP holders and implementers**
 - ✓ Focus on the needs of implementers and the industry as a whole;
 - ✓ Ensure involvement of implementer in the discussion of pool formation.
- **Provide highly-professional and independent essential checks;**
- **Licensing terms should be adapted to the connectivity needs/price points of devices;**
- **Aggregate royalty should reflect the value of the licensed technology;**
- **Patent pool should not be the only approach to license**
 - ✓ implementers need to have the freedom to choose different approaches and obtain SEP licenses best suited to their business requirements.
- **One-size-fits-all pool that offers required license, not required SEPs.**

Thank you.

把数字世界带入每个人、每个家庭、
每个组织，构建万物互联的智能世界。

Bring digital to every person, home and
organization for a fully connected,
intelligent world.

**Copyright©2018 Huawei Technologies Co., Ltd.
All Rights Reserved.**

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.



Fostering by Standards Bodies of Formation of Patent Pools: DVB's Experience

Patent pools: How to make patent pools work for both SEP holders and licensees?

Presentation to European Commission Webinar

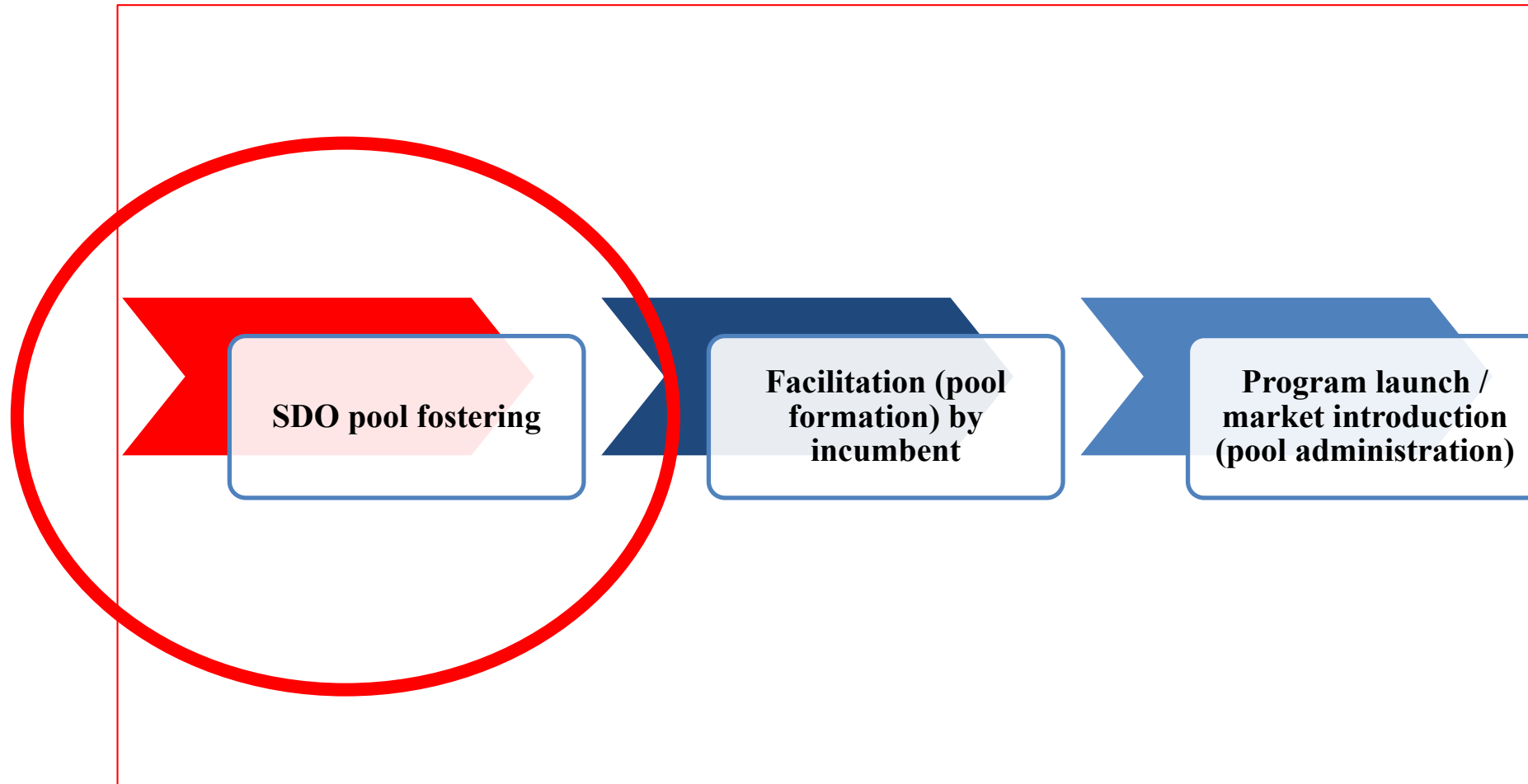
Carter Eltzroth
Legal Director DVB

20 April 2021

Standards bodies and pooling: why is pooling attractive **to SDOs**?

- In addition to lower aggregate royalty, greater certainty for quality of patents, reducing market uncertainty (cap on royalties), well-established regulatory framework, proven licensing model . . .
- SDO pool fostering builds on momentum from completion of a standard, results in earlier launch of pool and in *more timely availability of licensing* terms.
- Licensing arrangements are part of *life cycle of standard*, ensuring that it won't be a unimplementable “paper standard”.
- Pooling helps build *standards consensus*: When standards participants recognize that pooling is likely outcome, their work will not result in outsized rewards for few patent holders; pool deters “patent stuffers” and other risks of gaming the standards process.

Phases in Patent Pool: Precommercial SDO fostering



DVB fostering patent pools: Tool-kit to foster launch of pooling effort

Over time, DVB has developed tools for fostering

- **At launch of standard development**, tech contributors are asked to “check the box” confirming interest in participating in initial meeting of holders to discuss pool formation.
- **After standard adopted**, DVB invites to informal meetings those members (and non-members) with a well-founded belief that they hold patents essential to the standard.
These holders exchange views on timing of an effort to form a patent pool, the need for other SEP holders and the means to select a pool facilitator.
The holders canvas potential facilitators, ask them for their questions so the candidate facilitators can make informed proposals, invite them to make presentations.
- **As pool approaches completion**, DVB holds fringe meetings for exchange of views among stakeholders expressing individual views on prospective terms
Useful for diversity of EU, DVB markets and market participants

DVB fostering patent pools: Tool-kit to foster launch of pooling effort

Over time, DVB has developed tools for fostering

- **At launch of standard development**, tech contributors are asked to “check the box” confirming interest in participating in initial meeting of holders to discuss pool formation.
- **After standard adopted**, DVB (with members) with a well-founded pool. These holders exchange views with other SEP holders and the meeting. The holders canvas potential participants. Facilitators can make informed decisions.
- **As pool approaches completion**, DVB works with all incumbent administrators among stakeholders expressing individual interests. Useful for diversity of EU, DVB markets and market participants

DVB's record on fostering

13 pools fostered

9 pools launched to market
(plus 1 pool being facilitated)

5 pools licensing today

Not the only model: SDOs undertaking further steps in pool facilitation and administration

- Complex standards environment: “umbrella” body collecting IPR information from multiple SDOs as aid to implementers (US Smart Grid, DVB)
- DVB, MC-IF pool fostering
- Pool fringe discussions lead to formation of independent spin off (MPEG2 > MPEG LA)
- [Chinese AVS](#): SDO requiring patent holders to form pool
- DVB “gateway” technologies: facilitation (DVB preparing licensing agreements and licensing framework) leading to hand off to custodian / administrator
- SDO as a platform to develop model agreements / best practices (eg IEEE discussion group on standard forms to address orphan standards; “streamlining”)
- SDO partnering with incumbent (IEEE with Via Licensing)

Fostering by Standards Bodies of Formation of Patent Pools: DVB's Experience

Thank you!

Carter Eltzroth
Legal Director DVB
eltzroth@dvb.org

SDO Pool Fostering: Further Resources

- SEPs Experts Group, [Contribution to the Debate](#) on SEPs (Jan 2021), Proposal 72 (at pp 162 ff)
- [Press release](#), “VVC Pool Fostering identifies Access Advance and MPEG LA as possible administrators to take forward pool formation covering VVC-essential patents” (MC-IF, 27 Jan 2021)
- Frequently asked questions on pool fostering, and other materials, available at [VVC Pool Fostering | MC-IF \(mc-if.org\)](#)
- DVB Project, DVB’s Fostering of early Formation of Patent Pools: [Note to DVB’s Liaison Partners](#) and to Standards Bodies that author Materials normatively referenced by DVB Standards (2018)
- Eltzroth, Fostering by Standards Bodies of the Formation of Patent Pools (2018), [available at SSRN](#)
- Eltzroth, IPR Policy of the DVB Project: Negative Disclosure, FR&ND, Arbitration International Journal of IT Standards & Standardization Research, Part 1 (2008), Part 2 (2009)

Fostering Patent Pools During the Standardization Process

Jeffrey Blumenfeld
Acting General Counsel

ACCESSAdvanceSM

April 20, 2021

Patent Pool Fostering

- ❑ The success of a patent pool depends on a large number of factors independent of “fostering”
 - ❑ A key factor is the experience and skill of the administrator in finding, conferring with, and bringing together the right mix of SEP holders: both those with implementation-driven business models as well as those with licensing-driven business models
- ❑ Pools formation is driven by market forces, “organically”
 - ❑ Fostering is the exception rather than the rule
- ❑ Fostering may be helpful if pool formation is not happening organically
 - ❑ For example in industries where pools have never succeeded
 - ❑ But may be unlikely to succeed for the same reason that pools have not succeeded in those industries previously
- ❑ But fostering may interfere with and delay pool formation where a market-driven effort is in progress or likely would occur

Patent Pool Fostering

☐ Linking pool fostering to the standards development process may create downsides

- ☐ Participation in pool formation is a voluntary activity, as is standards setting
- ☐ Public policy and competition law/policy recognize benefits from broad participation, therefore risk if participation seen as not fully voluntary
- ☐ Not all “voluntary” activities feel “voluntary” to participants
 - ☐ will patent holders and implementers see pool participation as a mandatory feature of the standard?
 - ☐ for example, some SDOs require work-around of a contribution from a company that does not provide a positive Letter of Authorization (“LOA”)
 - ☐ would SDOs mandate or recommend work-around of contributions from company that does not indicate willingness to participate in pool?
 - ☐ valuable contributions to standards have come from companies that do not participate in patent pools, license only bilaterally
- ☐ How will this affect participation in standards development
 - ☐ After IEEE IPR policy change in 2015, have seen drop off in positive LOAs and increase in negative LOAs

Patent Pool Fostering

❑ Pool fostering should not begin before standard is finalized

- ❑ Any earlier efforts could be a signal to the standards organizer to consider working around the contribution of an entity not willing to participate
- ❑ Not clear how “fostering” can begin before the standard is final because before that, there is no way of knowing:
 - ❑ the value of the technology to implementations, which is crucial to determining royalty rates and terms
 - ❑ which patents will be essential, which is crucial to determining who are appropriate participants

❑ What are the appropriate bounds of fostering?

- ❑ Experts Group Report recommends fostering will not include discussion of rates and terms, which are at heart of pool formation
 - ❑ Is it appropriate for implementers who are not also SEP holders to jointly negotiate for the rates they will pay?
 - ❑ Does “buyer-side” collective action raise legal issues, such as whether a joint decision to not accept terms is illegal (likely yes, in US law)?

Patent Pool Fostering

- ❑ Market-driven pool formation has occurred for decades in US
 - ❑ First pool “approval” by US Department of Justice in 1997
 - ❑ Since then dozens of patent pools have been formed that follow EU, US, and others’ competition guidance
 - ❑ For example, in compact discs, video, audio, Wi-Fi, RFID, and many other technologies
- ❑ A number of experienced, independent third party administrators continue to curate market-driven pool formations in new technologies and new standards
 - ❑ Via Licensing
 - ❑ Access Advance (formerly, HEVC Advance)
 - ❑ Sisvel
 - ❑ MPEG LA
 - ❑ OneBlue

Patent Pool Fostering

- ❑ Pool fostering may be desirable when no pool is being developed within a reasonable time after standard is final
 - ❑ There is no predictable answer to the question of what is a “reasonable” time
 - ❑ Decision of when time is right to begin forming a pool depends on a number of factors specific to the technology and the industry, and identifying it is another core skill of experienced pool administrators
- ❑ Pool fostering may be necessary in industries where SEP holders resist such joint licensing
 - ❑ May bring together likely participants, both implementers and essential patent owners
 - ❑ May help educate implementers and patent owners who are not familiar with pools and what participation in a pool means
 - ❑ But may be unlikely to succeed for the same reason that pools have not succeeded in those industries

Patent Pool Fostering

- ❑ In industries where market-driven pool formation has occurred organically, it will continue to happen without fostering
 - ❑ Pool administrators and likely participants will be attracted by business opportunity
 - ❑ Not clear what fostering would add, and may interfere
- ❑ Pool fostering activities may have downside effects in industries in which successful pool formation has been market driven
 - ❑ May interfere with and delay market-driven pool formation efforts
 - ❑ May increase, rather than decrease, the likelihood of more than one pool forming for a particular technology or standard
 - ❑ Facilitation during standards formation may be too early to begin pool formation activities and may lead to results that do not address market effectively once technology is adopted

Patent Pool Fostering

- ❑ Proper pool formation optimizes outcomes for both licensors and implementers as required by FRAND
 - ❑ Curating discussions to ensure reaching those outcomes is a core skill of pool administrators in forming patent pools
 - ❑ Bringing together significant SEP holders, including those with licensing-driven business models and those with implementation-driven business models in a process curated by an experienced pool administrator
 - ❑ Discussions of rates and terms are market negotiations, ensuring balance of interests in results
 - ❑ Rates and terms that incent SEP holders to be licensors and that also incent implementers to be licensees
 - ❑ Both interests optimized by broad/deep patent coverage (therefore significant SEP holders) plus reasonable rates/terms
 - ❑ Goal is combination of patent coverage, rates, and terms that minimize friction so large numbers of licensors and licensees join

Patent Pool Fostering

- ❑ Leadership in ongoing administration of pools is another core skill of experienced pool administrators
 - ❑ Licensing should be primarily a sales process
 - ❑ Licensors and licensees depend on sophisticated systems for reporting, paying, tax payments (for licensees), as well as for collection and distribution of royalties (for licensors)
- ❑ Leadership in achieving those goals through give-and-take among participants is a core skill of pool administrators and takes years of experience to acquire



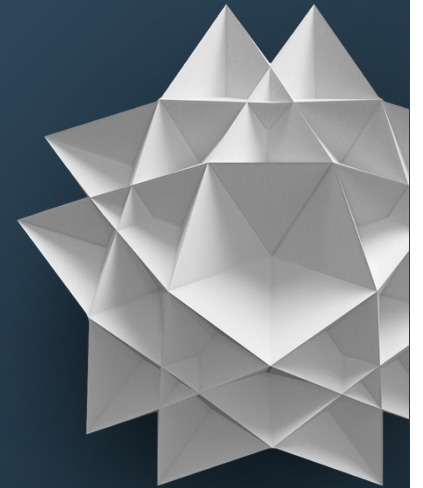
Thank You.

100 Cambridge Street, Suite 21400, Boston, MA 02114 USA | +1 617.367.4802 | www.accesscadvance.com

This material is a brief high-level summary and overview of certain terms for information purposes only. This summary is subject to change at any time at the discretion of Access Advance LLC.

The terms and information included in this presentation are **PROPRIETARY, CONFIDENTIAL**.

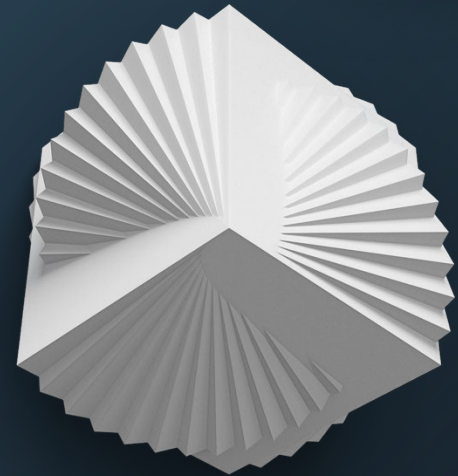
Are licensee negotiation groups feasible and would they reduce transaction costs, in particular for SMEs without market power?



Contribution to webinar of the European
Commission

20th April 2020

Dr Benno Buehler



Licensing negotiation groups could help offset disadvantages licensees currently face in negotiations with patent pools

Current structural asymmetries in negotiations with patent pools...

Pools repeatedly license out the same patents, and can therefore rely on the **same essentiality/validity assessments** for most negotiations

Each licensee must prepare costly new assessments for negotiations

Pools typically accumulate **legal expertise**

Licensees, especially in the IoT sector, often lack extensive legal IP expertise

Concerns were also voiced about certain pools applying strategies to extract potentially **non-FRAND royalty levels**

Licensees fall victim to these negotiation tactics



... can be offset by means of licensing negotiation groups (LNGs)

LNGs can **rely on joint essentiality and validity assessments**

LNGs' members can benefit from **pooling legal expertise**, which could be particularly important for the IoT sector

Especially smaller firms with less SEP exposition or a less experienced litigation team would be **protected by LNGs**

The EC's *Horizontal Cooperations Guidelines*¹ provide useful guidance on the evaluation of potential competition concerns

LNGs are similar to purchasing alliances, discussed in Section 5 of these Guidelines. Distinction is made between horizontal agreements having (i) an anticompetitive **object**, and (ii) anticompetitive **effects**.

Potential Concerns by Object

e.g. Price fixing among LNG members

Prima facie implausible & can be avoided by adequate setup of LNGs

Potential Concerns by Effects

The *Guidelines* list the following potential concerns:

- | | |
|--|--|
| 1. Risk of a collusive outcome | Limited
relevance
to assess
LNGs |
| 2. Risk of foreclose of competing purchasers by limiting their access to efficient suppliers | |
| 3. Increased market power of the licensees, that may ultimately force suppliers to reduce the range or quality of products they produce | Particular
relevance
to assess
LNGs |

¹ See “*Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements*”, OJ C 11, 14.1.2011, pp. 1-72.

Competition concerns prima facie unlikely, especially for LNGs that cover only a small share of the relevant markets

Main question to assess in practice: will LNGs represent a “**significant degree of market power**” on the purchasing market” (Guidelines, para. 202)

- According to the Guidelines this will be unlikely if LNG members have a combined market share **not exceeding 15%** on either the purchasing or selling markets (para. 208)
- LNGs among smaller licensees will therefore be **unlikely to raise competition concerns** in any event

Allegations that LNGs might risk becoming **buyers’ cartels** seem misplaced

- **Status quo is severely stacked against licensees**, rendering concerns about royalties being “too low” implausible in the first place
- SEP holders under **no obligation to accept potential non-FRAND offers** (Huawei/ZTE framework)

Concerns about an increased risk of **collective “hold-out”** implausible

- Several members of LNGs being part of a **single negotiation saves time** compared to a scenario of sequential negotiations
- **Potential delays can be further minimised** by setting short deadlines for members to accept license terms negotiated by the LNG
- In practice, the LNG will often be able to negotiate better terms than individual licensees could achieve, implying **strong incentives of LNGs’ members to accept the outcomes of LNGs** as opposed to striving for better individual deals
- **SEP holders could seek injunctions** if licensees were to engage in hold-out (Huawei/ZTE framework)

„How to make Patent Pools work for both SEP Holders and Licensees?”

EC Webinar

20.04.2021 K-ILI Uwe Wiesner

Confidentiality Class: PUBLIC

How to make Patent Pools work for both SEP Holders and Licensees?

Challenges in Automotive Business

Patent Pool Solutions in Automotive Industry

„Collective Licensee Negotiation Group“

- O Proposal of SEP Expert Group**
- O Scenario for Automotive Sector**

Challenges in Automotive Business

VOLKSWAGEN
AKTIENGESELLSCHAFT






Top WIPO Patent Applicants 2020

1 HUAWEI TECHNOLOGIES CO., LTD.	China	5,464
2 SAMSUNG ELECTRONICS CO., LTD.	Rep. of Korea	3,093
3 MITSUBISHI ELECTRIC CORPORATION	Japan	2,810
4 LG ELECTRONICS INC.	Rep. of Korea	2,759
5 QUALCOMM INCORPORATED	U.S.	2,173
6 TELEFON AB LM ERICSSON (PUBL)	Sweden	1,989
7 BOE TECHNOLOGY GROUP CO.,LTD	China	1,892
8 GUANG DONG OPPO MOBILE TEL. LTD	China	1,801
9 SONY CORPORATION	Japan	1,793
10 PANASONIC IP MGT CO., LTD.	Japan	1,611
11 HEWLETT-PACKARD DEV. COMP., L. P.	U.S.	1,595
12 MICROSOFT TECH. LICENSING, LLC	U.S.	1,529
13 ROBERT BOSCH CORPORATION	Germany	1,375
14 LG CHEM, LTD.	Rep. of Korea	1,374
15 NIPPON TELEGRAPH AND TEL. CORP.	Japan	1,372
16 ZTE CORPORATION	China	1,316
17 PING AN TECH. (SHENZHEN) CO., LTD.	China	1,304
18 SIEMENS AKTIENGESELLSCHAFT	Germany	1,202
19 FUJIFILM CORPORATION	Japan	1,128
20 NEC CORPORATION	Japan	1,121



Standardization Landscape

Speech <ul style="list-style-type: none">• Voice Recognition• SMS dictate• Text to speech function	HMI <ul style="list-style-type: none">• Pin Yin• Java VM9• IME• HWR...	Navigation <ul style="list-style-type: none">• TPEG• Navigation• ...	E-Mobility <ul style="list-style-type: none">• Inductive• Charging• ...	Charging Communication <ul style="list-style-type: none">• Billing	Online Services <ul style="list-style-type: none">• Voice Hybrid• Hybridradio• Online Traffic• Yellow Maps• (Charging Stations)• Dynamical POIs• Navi/card data• Online Parking and refueling• Security ...• Car2X
Media <ul style="list-style-type: none">• Online TV• Mediastreaming• NTFS exFAT• ...	Media Codecs <ul style="list-style-type: none">• MPEG 4 (H.264)• Xvid Video• DivX video• Flash video• PCM WAVE• ALAC• OPUS• AC3• AAC• H.265• MSS• HDS• DASH• HLS• DTCP• ...				Browser/ConnectWeb <ul style="list-style-type: none">• Browser• Mirror link• Apple CarPlay,• Android Auto• MFI• ...
Radio <ul style="list-style-type: none">• HD• DMB• Sirius• DAB• TPEG• VICS• M-Shield• ...	Sound Processing <ul style="list-style-type: none">• Echo Cancelling• In Car Communication	NAD <ul style="list-style-type: none">• BT• WLAN; WAPI• 2G,3G,LTE; E-call	ADAS <ul style="list-style-type: none">• ACC• Start/Stop• ...	Rearseat Entertainment <ul style="list-style-type: none">• DVD, Streaming	
Autonomous Driving <ul style="list-style-type: none">• -----• -----					

Complex Products

High Expectations of well-informed Customers

Global Market and multi-national Regulation

Deep Supply Chains with many „Black Boxes“

Needs for broad Scope of Standardization

Automotive Business needs **high reliability of all partners** during development, production and distribution of cars. **Legal certainty is necessary earliest possible in a wide range.**

Conclusion: Freedom-to-operate analysis for digitalization, connectivity and semiconductor by OEMs?
Patent hold-out is not an option for Automotive Business.
Due to increasing complexity supplier's responsibility is a must more than before!

Case Study AVANCI

One-stop Shop



Licenses granted to OEM only

Fixed Price

Does not meet the need
of potential customers!

Tesla same like Dacia?
Porsche same like Toyota?

At October 2020 “the Avanci platform includes 38 licensors in total and has licensed 14 million vehicles in total. The automakers that have taken a **license represented approximately 12% of the total worldwide vehicle production in 2019.**”

Source: THE VALUE OF STANDARD ESSENTIAL PATENTS AND THE LEVEL OF LICENSING by Bowman Heiden, Jorge Padilla and Ruud Peters, 23 October 2020

Proposal 75 of SEP Expert Group

.....

Absent such an LNG-internal agreement, an LNG would only be acceptable as a negotiation partner for SEP holders, if the members of the ~~LNG are all operating in the same level of the value chain and accept that they cannot push the responsibility to take licences up or down in their value chains.~~

.....

Proposal is a good approach in general, but article above ...

...does not work in automotive industry due to complexity and heterogeneous composition of supply chain landscape.

-->Different types of suppliers on different levels. Type 1 are suppliers with an own remarkable SEP-portfolios, Type 2 are suppliers with a small or negligible SEP-Portfolio. Both types in different levels.

Scenario for the Automotive Sector

The LNG should be open to any automobile manufacturer or component supplier that wants to participate.

A truly neutral representative should be appointed to conduct independent negotiations on behalf of the LNG for dedicated projects.

The appointment of the neutral representative should be given by an administrative agency configured as a non-profit entity open to all interested parties.

The neutral representative should operate the business on a day-to-day basis, with strict policies in place to prevent sharing of members' competitively sensitive information.

Members should remain free to negotiate with patent pools independently, and should have an obligation to negotiate in good faith if a patent pool requested to avoid any hold-out.

LNG facilitate fair payment to patent owners.

Reduction of transaction costs based on relatively high volume.

Transparency to component suppliers and automobile manufacturers.

Strict compliance with antitrust rules

Scenario for the Automotive Sector

The result of the negotiations should be:

a common understanding about the value of the whole stack of the relevant SEP,

a scheme to evaluate the royalty share of different patent owners,

a master agreement to be used for contracts between the licensor pool and a single licensee.

Core issues:

The amount of a FRAND royalty does not have to depend on the position of the licensee within the supply chain. Only one member of the implementation chain takes an exhaustive license.

Different levels of the supply chain can (as agreed individually) contribute to the royalty agreed between Patent Pool and LNG.



Are License Negotiation Groups Feasible?

EC Webinar on Patent Pools

2021-04-20

Ruud Peters

IoT Licensing Landscape

SEP licensors:



More diverse implementers to be licensed



Licenses to be granted for more diverse products



Different licensing practices in various IoT verticals



More resources required for global licensing programs

Implementers:



Using more standardized technologies and thus SEPs



Requiring licenses from multiple SEP licensors



Assessing SEP exposure for their products not easy



Implementers less familiar with standards and SEP licensing

Impact IoT Licensing Landscape



SEP Licensors: Patent pool licensing becomes more attractive



Implementers: License negotiation groups (LNGs) become more attractive



Both patent pools and LNGs reduce transaction cost

Potential benefits LNGs for implementers and licensors

Implementers:



Lower transaction cost by sharing resources and cost



Sharing of information re essentiality / validity of SEPs



License negotiations may give better outcome



Increased level playing field

SEP licensors:



Lower transaction cost due to single negotiation process



Faster increase of licensing revenues



Higher license coverage rate provides leverage to unlicensed implementers



Increased level playing field

LNGs: Largely uncharted waters

What are the criteria for a grouping to qualify as an LNG?

Is there a safe harbor for LNGs to avoid conflict with competition laws?

May a SEP licensor request bilateral negotiations with one or more members of a LNG?

Impact on members if an LNG does not operate in line with ZTE v Huawei framework?

LNGs: Main aspects to be considered



Governance rules internal LNG



Negotiations between LNG and SEP licensor / patent pool



Implementation of agreement between LNG and SEP licensor / patent pool



Handling disputes between LNG and SEP licensor/patent pool

Industry association as LNG



Members allowed to opt-out at the start of process



LNG members agree on mandate party, representatives to negotiate on their behalf



Negotiations in good faith in accordance with ZTE v Huawei negotiation framework



LNG members vote on approval result negotiations



LNG members sign licenses with SEP licensor within e.g. 6 months after approval



If not timely signed-up, association to suspend membership or give other penalty



Association may support licensed members in staying compliant

Conclusions re LNGs

LNGs offer efficiencies to both implementers and SEP licensors

Risks inherent to buying groups are more limited for LNGs as ZTE v Huawei framework applies

Guidelines for LNGs to operate in safe harbor to be developed

LNGs are a viable option to similarly situated implementers in need for SEP licenses

The background features two large, decorative, curved lines. One line starts from the top right and curves downwards towards the center. The other line starts from the bottom left and curves upwards towards the center. Both lines are composed of multiple overlapping layers in shades of light blue and light green, creating a sense of depth and movement.

Thank you!

**SUMMARY OF REMARKS BY DANIEL P. MCCURDY
CEO – RPX CORPORATION
EUROPEAN COMMISSION WEBINAR
PATENT POOLS – APRIL 20, 2021**

GOOD AFTERNOON. THANK YOU, MORITZ, FOR YOUR KIND INTRODUCTION, AND THANKS TO THE EUROPEAN COMMISSION FOR ORGANIZING AND HOSTING THIS WEBINAR ON THIS VITALLY IMPORTANT SUBJECT.

RPX WAS FORMED IN 2008. OUR MISSION IS STRAIGHTFORWARD. RPX PROMOTES INNOVATION AND COMPETITION BY SIGNIFICANTLY REDUCING PATENT-RELATED COSTS INCURRED BY COMPANIES WORLDWIDE.

OUR DEFENSIVE LICENSING MODEL IS SUBSCRIPTION-BASED. MORE THAN 190 COMPANIES WORLDWIDE FROM THE TECHNOLOGY, AUTOMOTIVE, FINANCE, ENERGY AND OTHER SECTORS ARE SUBSCRIBERS TO OUR RPX SERVICE. OUR JOB IS TO RESOLVE PATENT DISPUTES THAT ARE SHARED AMONG OUR AGGREGATED SUBSCRIBERS IN A MANNER THAT IS BETTER, FASTER AND ACHIEVES LOWER COST THAN TENS OR HUNDREDS OF COMPANIES CAN EXPECT TO ACHIEVE ACTING ALONE.

WE DO THIS BY COMBINING WORLD-CLASS TRANSACTION EXPERTISE WITH ONE OF THE MOST SIGNIFICANT COLLECTIONS OF PROPRIETARY PATENT DATA IN THE WORLD. WE COUPLE THIS WITH OUR UNPARALLELED ANALYTIC TOOLS THAT HELP US IDENTIFY EMERGING PATENT DISPUTES, ALLOWING US TO TAKE ACTION THAT EITHER AVOIDS OR EFFICIENTLY RESOLVES MANY OF THEM.

SINCE OUR FORMATION, WE HAVE COMPLETED MORE THAN 830 PATENT OR LICENSE ACQUISITIONS, PAYING MORE THAN \$3.4 BILLION DOLLARS FOR THE RIGHTS WE OBTAINED. BY GROUPING LICENSEES TOGETHER THROUGH OUR MODEL, WE ESTIMATE WE HAVE SAVED OUR MEMBERS NEARLY \$5 BILLION IN TRANSACTION EXPENSES PLUS THE COST OF THE LICENSES THEY WOULD HAVE OBTAINED (WHICH WOULD LIKELY HAVE EXCEEDED THE \$3.4 BILLION WE SPENT BECAUSE OF THE EFFECT OF AGGREGATION). SIMILAR SAVINGS BY LICENSORS IN AVOIDED TRANSACTION COSTS ARE ALSO LIKELY TO HAVE BEEN REALIZED. THESE SAVED EXPENSES CAN BE INVESTED INTO RESEARCH AND DEVELOPMENT, GENERATING INNOVATION TO FUEL ECONOMIC GROWTH AND SOCIETAL BENEFIT.

STUDIES HAVE SHOWN THAT THE ASSOCIATED TRANSACTION COSTS IN THE AGGREGATE, ACCRUING TO LICENSING AGENTS, TRANSACTIONAL AND LITIGATION ATTORNEYS, EXPERT WITNESSES, AND OTHERS, OFTEN EXCEED THE AMOUNTS ULTIMATELY PAID BY LICENSEES FOR RIGHTS TO THE PATENTS IN DISPUTE.

THESE MONETARY COSTS ARE FURTHER COMPOUNDED BY ECONOMIC LOSSES RESULTING FROM THE DISTRACTION OF BUSINESS EXECUTIVES AND TECHNOLOGISTS WHO BECOME ENTANGLED IN THESE

DISPUTES. THIS IS PARTICULARLY DAMAGING TO SMES THAT LACK THE RESOURCES OF LARGER COMPANIES.

THE QUESTION PUT TO THIS PANEL FOR CONSIDERATION IS: ARE LICENSEE NEGOTIATION GROUPS FEASIBLE AND WOULD THEY REDUCE TRANSACTION COST, IN PARTICULAR FOR SMES WITHOUT MARKET POWER?

THE ANSWER IS AN ABSOLUTE “YES.” WE HAVE PROVEN THE MODEL FOR MORE THAN A DOZEN YEARS, WITH TENS OF NEW COMPANIES YEAR AFTER YEAR TO OBTAIN THE BENEFITS OF AGGREGATION.

MOREOVER, SIMILAR TO OUR MODEL OF LICENSEE AGGREGATION, LICENSORS INCREASINGLY AGGREGATE PATENTS FROM MULTIPLE PATENT OWNERS, THEREBY EVEN FURTHER INCREASING EFFICIENCY. COMBINING LICENSOR-SIDE PATENT POOLS WITH LICENSEE-SIDE DEFENSIVE AGGREGATION POTENTIALLY ALLOWS MANY PATENT OWNERS TO LICENSE PATENTS TO MANY LICENSEES THROUGH A SINGLE TRANSACTION.

THE HIGHLY PRO-COMPETITIVE APPROACH TO LICENSING THAT RPX AND OTHER LICENSEE AGGREGATORS OFFER PROVIDES AN ADDITIONAL OPTION TO SETTling PATENT DISPUTES THROUGH PROTRACTED LITIGATION OR NEGOTIATING DIRECT LICENSES. IT DOES NOT PREVENT BILATERAL NEGOTIATIONS, BUT SIMPLY OFFERS AN ADDITIONAL COST-EFFICIENT OPTION THAT NUMEROUS COMPANIES HAVE FOUND TO BE HIGHLY ATTRACTIVE.

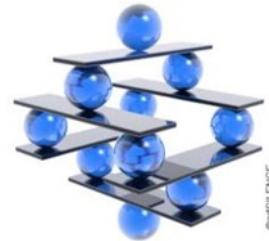
IN ADDITION, BY OBTAINING LICENSES FOR MANY COMPANIES AT THE SAME TIME IN A SINGLE TRANSACTION, IT HELPS PROVIDE INDUSTRY PARTICIPANTS COMFORT THAT THEY WILL NOT BE ISOLATED WITH A ROYALTY WHILE OTHERS IN THE INDUSTRY ARE LEFT UNBURDENED. THE MORE BROADLY APPLIED THIS TECHNIQUE IS, THE MORE IT WILL REDUCE HOLD-OUT AND HOLD-UP SCENARIOS USING MARKET FORCES, RATHER THAN GOVERNMENT INTERVENTION, TO DO SO.

GOVERNMENT CAN HELP ENCOURAGE THIS PRO-COMPETITIVE TECHNIQUE BY CLARIFYING THAT AGGREGATION OF LICENSEES IN A MANNER THAT IS PRO-COMPETITIVE IS ENCOURAGED. THIS WOULD REDUCE CONFUSION BY MAKING CLEAR THAT GOVERNMENT VIEWS SUCH LICENSEE AGGREGATION, PRACTICED STRICTLY IN A MANNER THAT DOES NOT RESTRICT MARKET CHOICE, AS PRO-COMPETITIVE.



Patent pools:

How to make patent pools work for both SEP holders and licensees ?



Roundtable 3: Licensee Negotiation Groups

Collette Rawnsley*

Director, European IP Policy & Advocacy, Nokia Technologies

20 April 2021

* Disclaimer: the views expressed in this presentation are those of the speaker only and cannot be regarded as the position of Nokia Technologies

Proposal 75: Collective Licensing Negotiation Groups

- If groups of implementers could collectively negotiate with individual or groups of SEP holders and patent pools, it may further lower the transaction cost
- Proposal: to develop an appropriate mechanism and controls to allow licensee negotiation groups to jointly negotiate licences with individual SEP holders and SEP patent pools without the risk of getting in conflict with antitrust regulation
- Objective?
 - To facilitate licensing – focus on the need to negotiate and conclude licences
- Expert Report identifies competition concerns, in particular:
 - Risk that the licensee negotiation group becomes a buyers' cartel
 - Collective Boycott / coordinated hold-out
- Clear challenges
 - Expert Report raises more questions than it provides answers
 - As envisaged, unclear that potential efficiencies would be generated practice

Justifiable Concerns?

- The Expert Group Report is right to underline the need for careful consideration of the competition law issues that would arise from the coordination envisaged in Proposal 75
- The Proposal should be distinguished from (pro-competitive) patent pools which
 - Combine largely complementary rather than competing technologies;
 - Are optional
 - Individual SEP-holders determine independently whether or not to participate in a patent pool
 - Provide choice (for SEP-holders and licensees)
 - They are an alternative to direct licences and are not exclusive
 - SEP-holders and implementers retain the right to enter into individual licences/licensing negotiations
 - Reduce transaction costs and set a limit on cumulative royalties to avoid double marginalisation/ 'double-dipping'

Will the Proposal Facilitate Licensing in Practice?

- While Proposal 75 is intended to facilitate licensing, there is a real, not hypothetical, risk of licensee negotiation groups merely being vehicles for:
 - Co-ordinated hold-out
 - Seen examples of companies, including in the IoT space, colluding to avoid taking licenses
 - Driving down royalty rates
 - In circumstances where SEP-holders are already bound by their respective FRAND commitments
- Risks undermining:
 - The ability of SEP-holders to invest in future R&D and to participate in the further development of open standard
 - The EU' s broader policy objectives in terms of leadership in 5G (and beyond); and tech sovereignty

Efficiencies in Practice: Fact or Fiction?

- Would the Proposal deliver sufficient countervailing efficiencies in practice?
 - Report indicates that there are questions and concerns about the mandatory/voluntary nature of the buyers' group(s)
 - Skeptical that efficiencies would in fact be generated if participation is optional and non-exclusive, yet a mandatory and exclusive scheme poses significant competition risk
- Will the Proposal lead to 'negotiating on a more equal footing' ?
 - SEP-holders 'incentivized' to enter into collective negotiations and forego the ability to negotiate individual licences, but members cannot be required to accept a negotiated agreement (absent explicit commitment)
 - buyer/market power – not a 'one size fits all' assessment
- Key question: would the individual members be bound by the licensee negotiation group?
 - Possibility for negotiations with the group to be derailed/vetoed at a late stage (even by a single company) to be followed by bi-lateral negotiations etc.?

Some Additional Questions & Concerns

- Potential distortion of competition between members of the buyers' group where a member rejects the negotiated agreement
 - Competitive advantage over the remainder of the members of the buyers' group in individual licensing negotiations, unless all members reject the deal negotiated by the group
 - Potential to negate benefits/efficiencies for SEP-holders and other implementers
- What are the implications for enforcement?
- Expert Report identifies the need for the set-up and activities of licensing negotiation groups to be scrutinized by competition authorities
 - Understandably the Report focuses predominantly on the negotiation stage but:
 - The 'set up' is also important given the risks of anti-competitive information exchange, collusion and/or coordinated conduct
 - Need to ensure that any preliminary discussions comply with applicable competition law rules regarding the exchange of strategic information, particularly given that there are ongoing licensing negotiations

NOKIA

***Patent Pools: How to Make
Patent Pools Work for Both
SEP Holders and Licensees?***

***ALTERNATIVE
COLLECTIVE LICENSING***

April 21, 2021

Garrard R. Beeney

Sullivan & Cromwell LLP

Background: Why Pools/Joint Licensing of SEPs

- Combination of Complementary Assets: The Quintessential Economic Efficiency
- Reduces Blocking Positions
- Reduces Uncertainty
- Reduces Combined Royalties (Merges Study)
- Fair return Incentivizes Further R&D
- Fair Terms Incentivize Adoption/new product development
- Compensates/Encourages small innovators
- Standard terms: competition neutral
- Properly run pools are in the interest of innovators and implementers. Without a pool, multiple uncertain bilateral license transactions and inefficient dispute resolution.

If Pools Increase Welfare, How Do We Mandate/Incentivize Their Formation?

- **Mandatory pools:**
 - The legal issues:
 - Patents as property
 - Forced collective action?
 - Extraordinary circumstances (Covid?)
 - The practical issues:
 - Who do we “force”
 - Impact on SDO participation
 - Who decides the terms of the license
 - Impact on R&D

If Not “Forced,” Should We Incentivize?

- Financial support for formation/SEP evaluation.
- Preferences in SDO (“all things being equal”) for patented technologies committed to good faith pool formation.
- Relaxation of competition rules:
 - Commitments to accept FRAND terms, subject to non-infringement/invalidity suits
 - Higher likelihood of success with joint implementer negotiations? Monopsony/boycott issues.
 - Should we incentivize bilateral terms based on pools terms?
 - Collaboration on “top down” approach with non-pool participants.
 - SDO discussions of value/license terms.
 - Forced mediation or even arbitration.
- Funds for comparative qualitative analysis.

If Not “Forced,” Should We Incentivize?

- Safe harbors
 - From competition rules.
 - From FRAND defenses once there has been market acceptance – presumptively FRAND.
 - Disincentives for hold-out.



How do Chinese Patent Pools work?

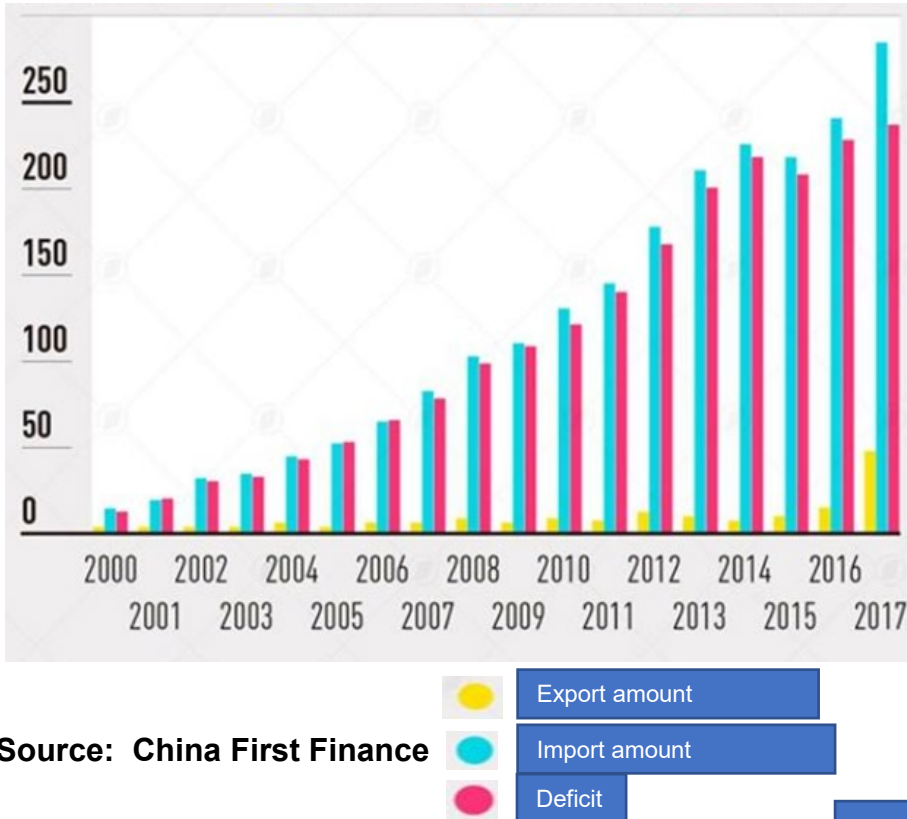
A case study of a Chinese patent pool

Jonathan Yu
General Counsel of Oppl Lighting

Status Quo of Chinese IP Business (patent pool)

Intellectual Property Royalties Deficit

USD 100 million



- IP import (licensing in) >> IP export (licensing out)
- More in the position of implementors
- Lack of sufficient patent pool practice
- Several patent pool examples:
 - **CTU-tech**: Collective Negotiation/Lower royalties
 - **AVS**: Lower implementing cost
 - **LED Industry Patent Alliance**: Mitigate overseas IP risks
 - **Medical Device Patent Alliance**: Reduce internal litigation wars

No Mandatory patent pool (provided by law or regulation) in China

AVS Patent Pool example (information public available)

- Founded in 2002, initiated by Computing Institute of Academy of China Science
- AVS SDO/patent pool Legal frame widely solicited opinions from MNCs/IP owners/implementors
- SDO Members' Licensing options: (patent pool voluntary)
 - Sub-group participants may select one default licensing condition from: (1) RAND Royalty Free (2) patent Pool (3) RAND
 - Sub-group non-participants may select one default licensing condition from (1) RAND Royalty Free (2) patent Pool (3) RAND (4) No License
 - A SEP holder may choose to provide more favorable license condition than its default commitment
 - **Contributors' licensing option is limited:**
 - CN SEPs: (1) RAND Royalty Free (2) Patent Pool;**
 - Oversea SEPs (1) RAND Royalty Free (2) Patent Pool (3) RAND**
- Patent pool or the royalty schedule formed **at an early stage**.

AVS Patent Pool example continue (information public available)

- AVS Patent Pool Management Committee : Representatives from SEP holders, **users/implementors** and experts with government working background
- AVS Patent pool royalty fee:
 - Royalty free for content provider and operators
 - Charge royalty on device level
 - One RMB per decoder/encoder in China (low price vs huge market)
 - **Low cost**, attractive for implementors comparing to other competitive standards
- Strong **government support**.

On Demand Agencies as One-Stop-Shop

- Goals of Proposal 74 of the SEP-Expert Report
 1. Provide willing licensees with a one-stop-shop
 2. Tackle holdout
 3. Foster the formation of pools

Bilateral licenses remain possible

except by court
order in litigation

Tackling hold-out

- Hold-out succeeds as long as licensors don't enforce
- in litigation: objection against injunctive relief
 - > requires willingness to take a licence
- by rule of law: willingness to take a licence for all SEPs
 - > feasible with the agency (or pool)
 - > The agency becomes party of the litigation
- -> court order: determines aggregate royalty payable to agency

SURVEY

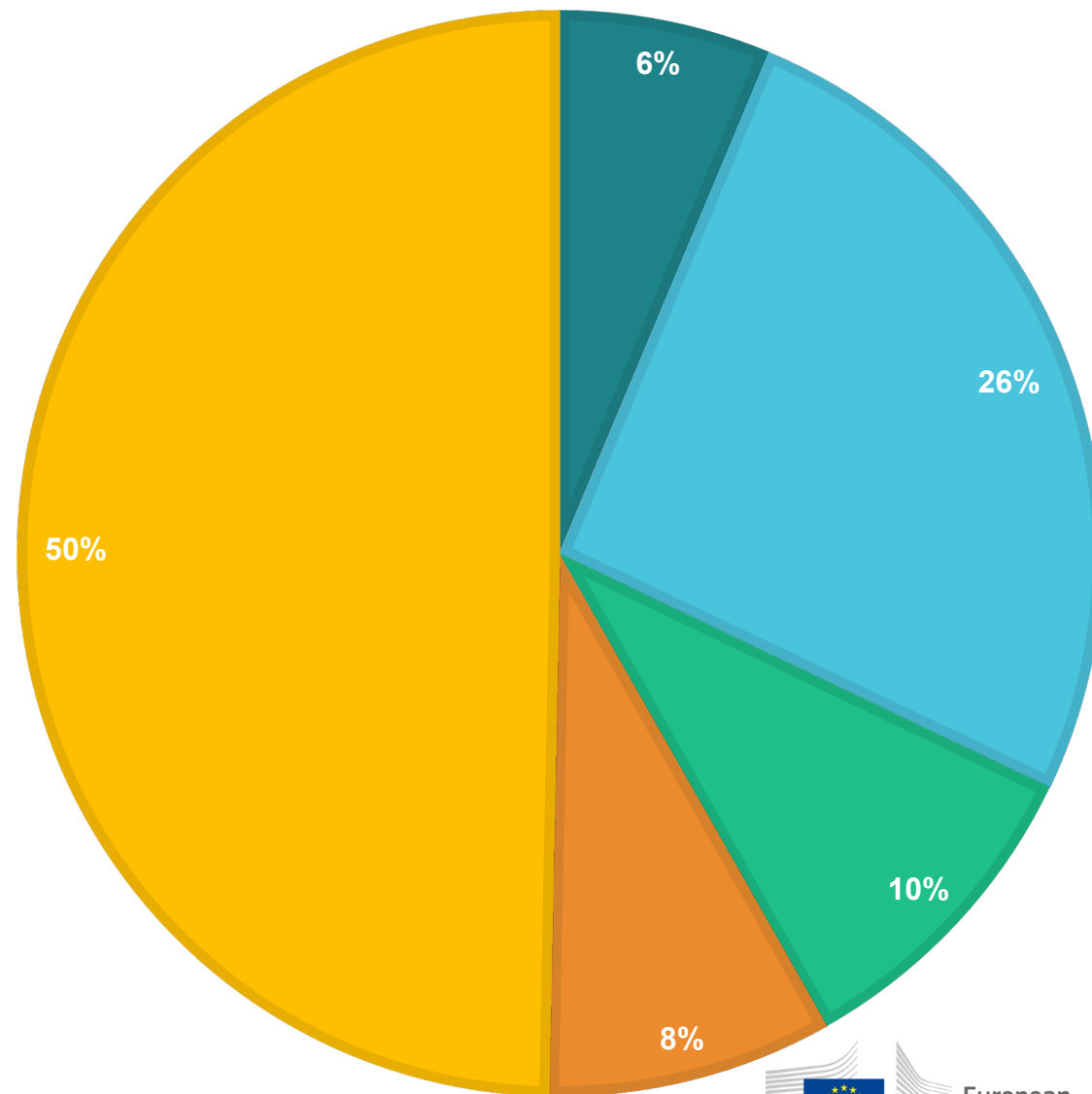
How to make patent pools work for both SEP holders and licensees?

SEP Webinar 20 April 2021

Survey answers per functions.

- SEP Holder
- SEP Holder & Implementer
- SEP Implementer
- Patent Pools
- Other (academia, judiciary, associations, others such as law firms and N/A)

REPRESENTING ...



1. Would sector specific patent pools gain more ground with the advent of the IoT?

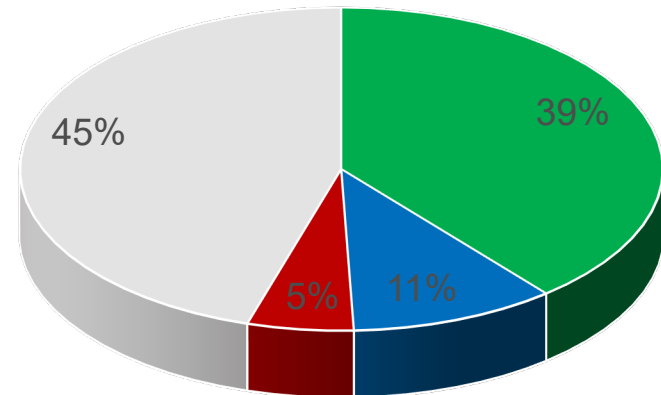
■ Yes

■ Depends (please explain)

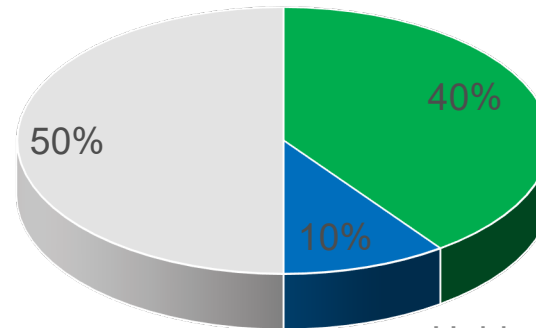
■ No

■ No opinion

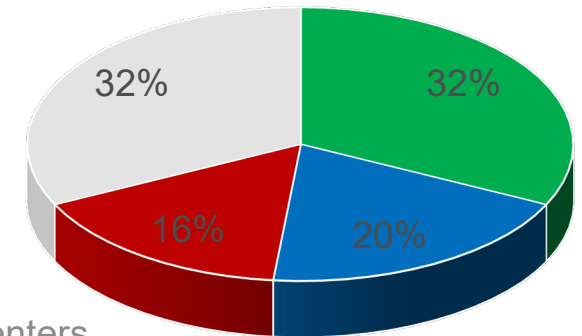
Total



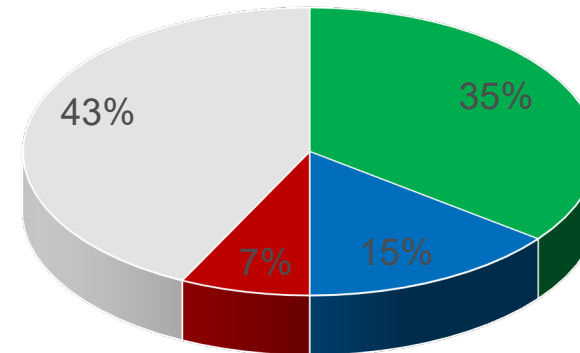
SEP Holders



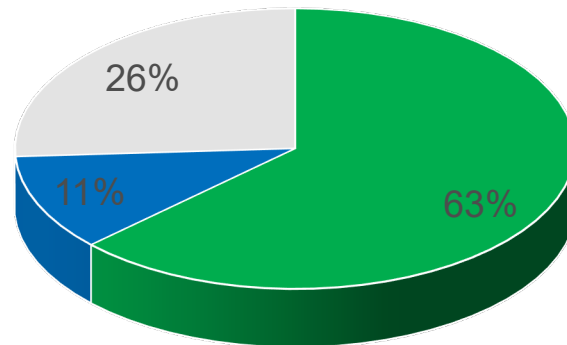
SEP Implementers



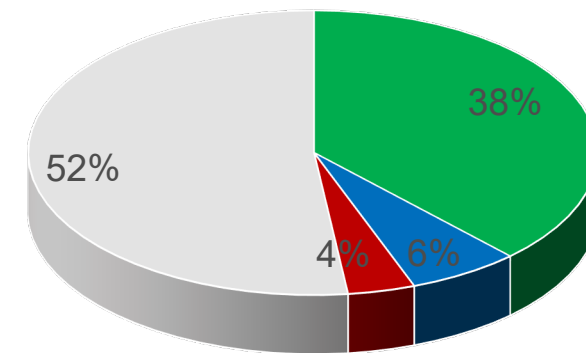
Holders and Implementers



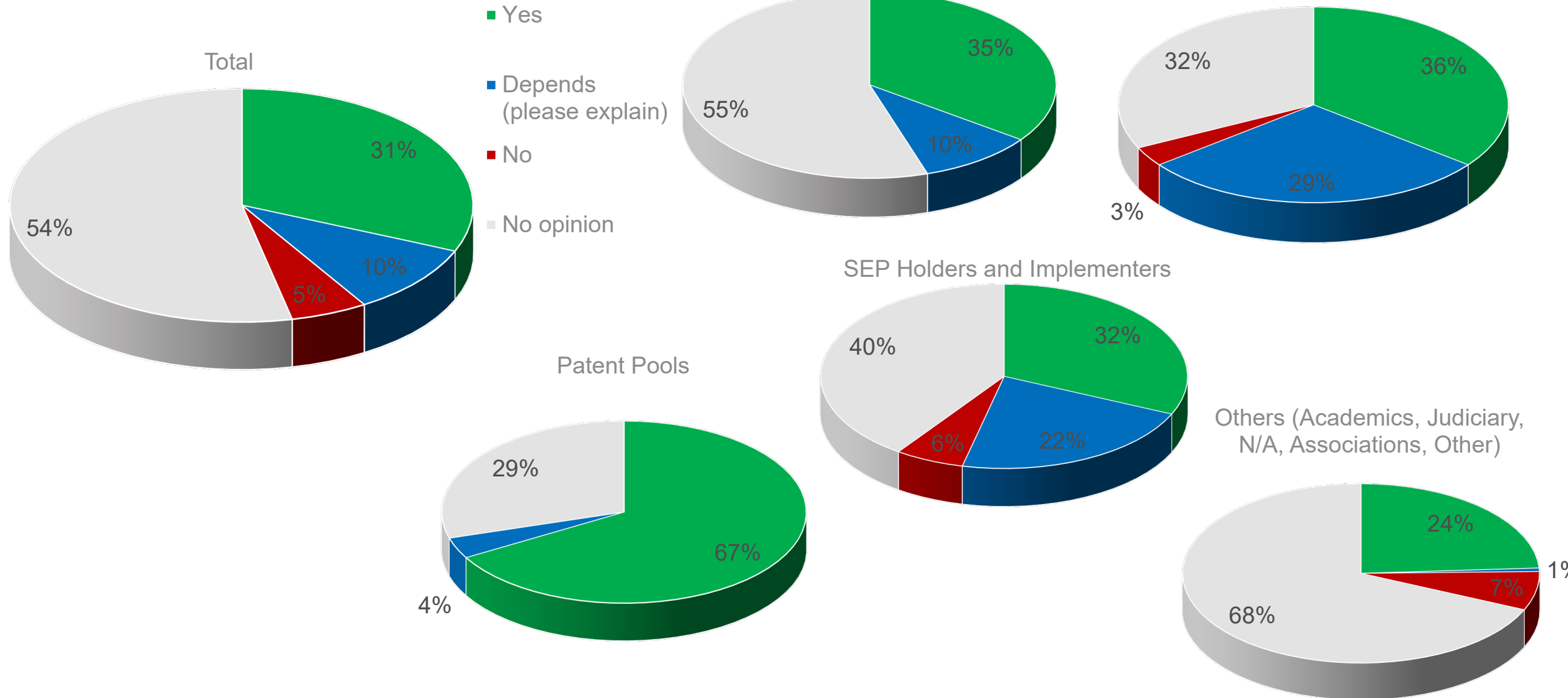
Patent Pools



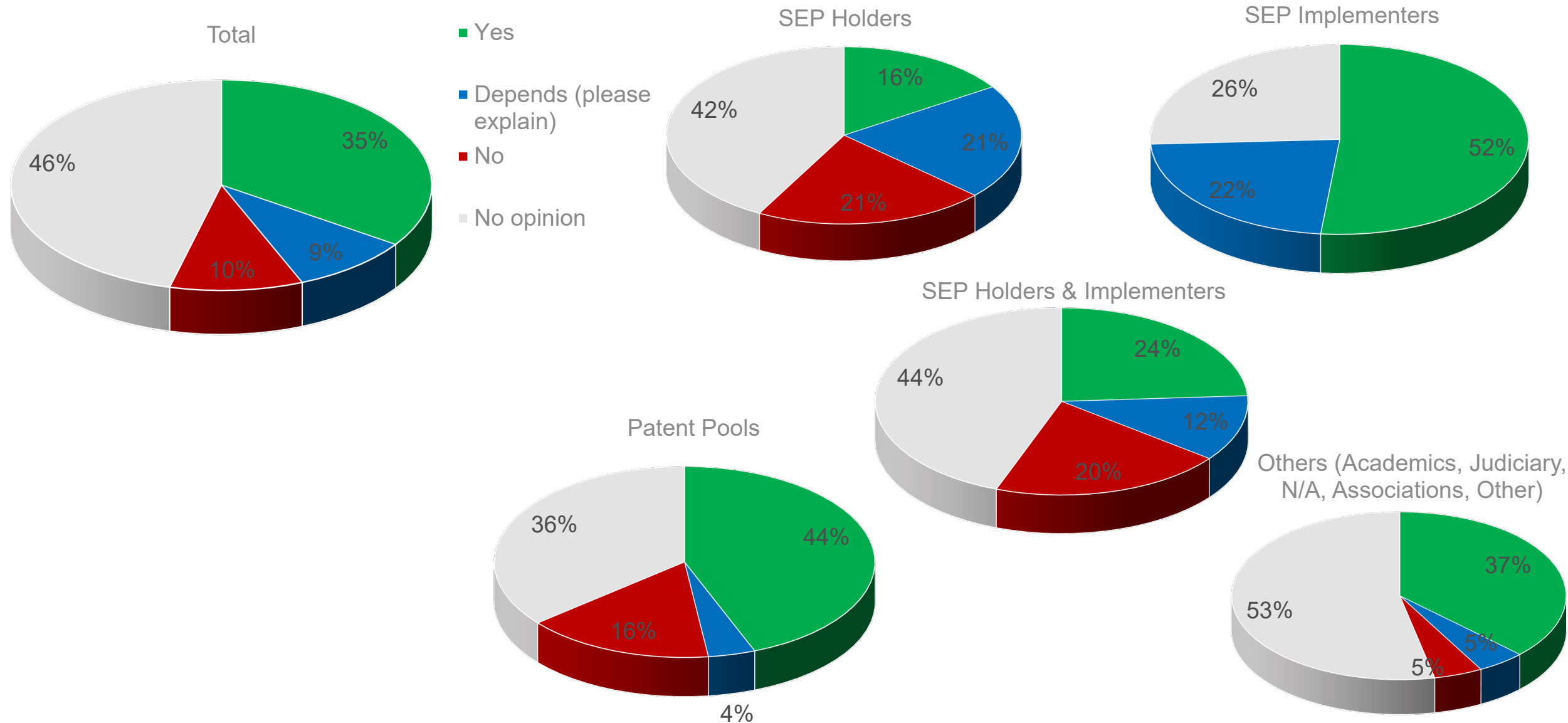
Others (Academics, Judiciary, N/A, Associations, Other)



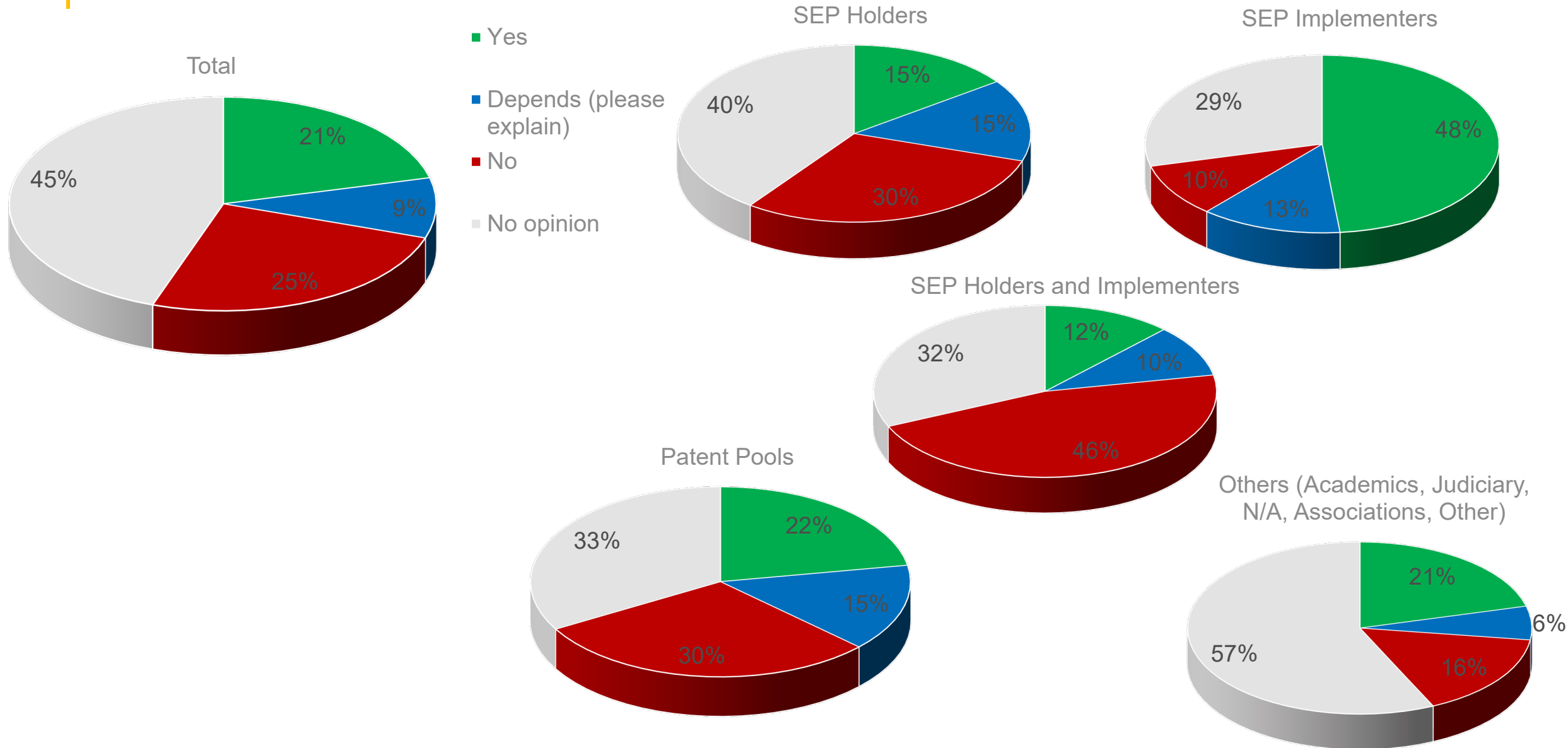
2. Would you be interested in licensing through a pool?



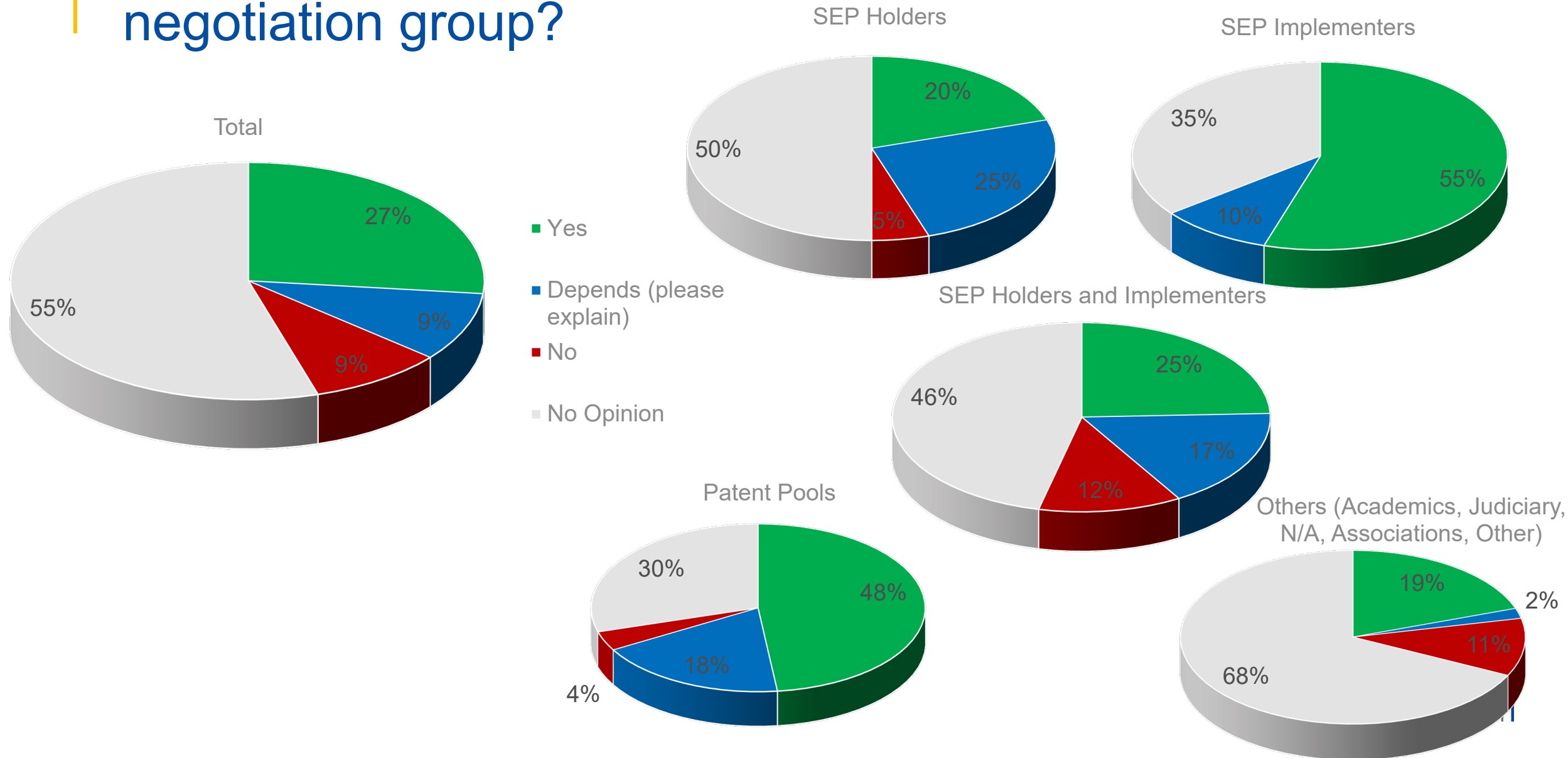
3. Would the promotion of the patent pool formation process by Standard Development Organisations be a good way to accelerate the establishment of a patent pool?



4. Do you consider that the mandatory formation of a patent pool would facilitate SEP licensing?



5. Provided that competition concerns could be resolved, would you participate in negotiations with a licensee negotiation group?



Thank you



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

