SISVEL

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Patent Pools: The road to successfully establishing them

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TTO CIRCLE
1ST PLENARY MEETING

WE PROTECT IDEAS

Presentation Outline

1. BACKGROUND OF THE SISVEL GROUP

Who is Sisvel?

- Sisvel is a dynamic and full service global licensing company with subsidiaries and offices in three continents
- Founded in 1982 by Roberto Dini to spin-off from Indesit a significant portfolio of television patents, Sisvel has deep roots in the consumer electronics industry
- Today, Sisvel is a fully committed independent organization focused on the quality and results of its licensing programs
- Sisvel has its own research laboratories and engineering team.

Sisvel's Global Presence

Joint Licensing Programs Managed by Sisvel

CDMA2000 DVB T DVB T2

THE RFID CONSORTIUM MPEG AUDIO

Programs under Development

Lte abgn WiFi DVB C2

Sisvel's Unique Strengths:
Independence, Technical Ability, Global Team

- Alone among major licensing administrators, Sisvel has no shareholders active in downstream businesses related to the technologies it licenses
- Sisvel has technical expertise reflecting its deep roots in the electronics and broadcasting industries
  - Engineering team with two operating laboratories
  - Alliances with research universities
- All of Sisvel's regional offices are staffed by dedicated licensing professionals with local expertise

3. PATENT POOLS

Patent Pools Basics

- A “Patent Pool” is a portfolio of technical/commercial essential patents needed to have successful products on the market, but owned by different parties
- The purpose of any Patent Pool is to facilitate licensing of essential patents by creating a “One stop shop” that reduces transaction and administrative costs
- Provides certainty and predictability to the market on the level of royalty rates and establishes a market reference
- Ensures uniform and non-discriminatory licensing of essential patents through an independent professional administrator
- Decreases likelihood of duplicative investments to “invent around”

Royalties for Multimedia DVD Players

Licensing bodies	Technology	Royalties/Licensing fees
3C (Philips, Sony, Pioneer, LGE)	DVD format	$3,50 per player $5000 advance payment
6C (Hitachi, IBM, Mitsubishi, Matsushita, Toshiba, JVC and Warner Home Video)	DVD format	The greater of: (i) 4% of the net selling price (ii) US$ 3-4 per player US$8.00 at maximum
Philips	Dolby AC 3 format	$0,20 per channel; $0,60 max
Philips	Dolby DTS	$0,20 per channel; $0,60 max
Philips	Video CD compatibility	$0,75 per player $5000 advance payment
Philips	CD player standalone	$5000 entrance fee 2% per player
Dolby	AC-3	Patent Royalty $0.15/channel and max of $0.45/hardware.
Dolby	Dolby digital decoder	$0,26 per channel
Nissim	DVD Player	$0,25 per player
Sisvel	MP3	$0,30 per channel
Mpeg LA	Mpeg 2 video	$2,50 per player
DivX	DivX software	$2 per player
Thomson	MP3	$0,75 per player

Royalty Stacking for Multimedia DVD Players


The United States of America

The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.

If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extensions.

$19 US
Royalties for IP Rights charged by 9 licensors

$20 US
Hardware DVD player

Patent Pools are Pro-competitive

Infact Patent Pools have substantial pro-competitive effects, including:

- Establishing a single reasonable royalty rate (that, according to economic theory, will be lower than the cost of separately negotiated licenses);
- Clearing blocking patents that would otherwise prevent competitive entry into a field;
- Reducing royalty stacking and hold up behavior; and
- Lowering costs for POs in collecting royalties (with benefits for Licensees as well) and increasing efficiency of the system.

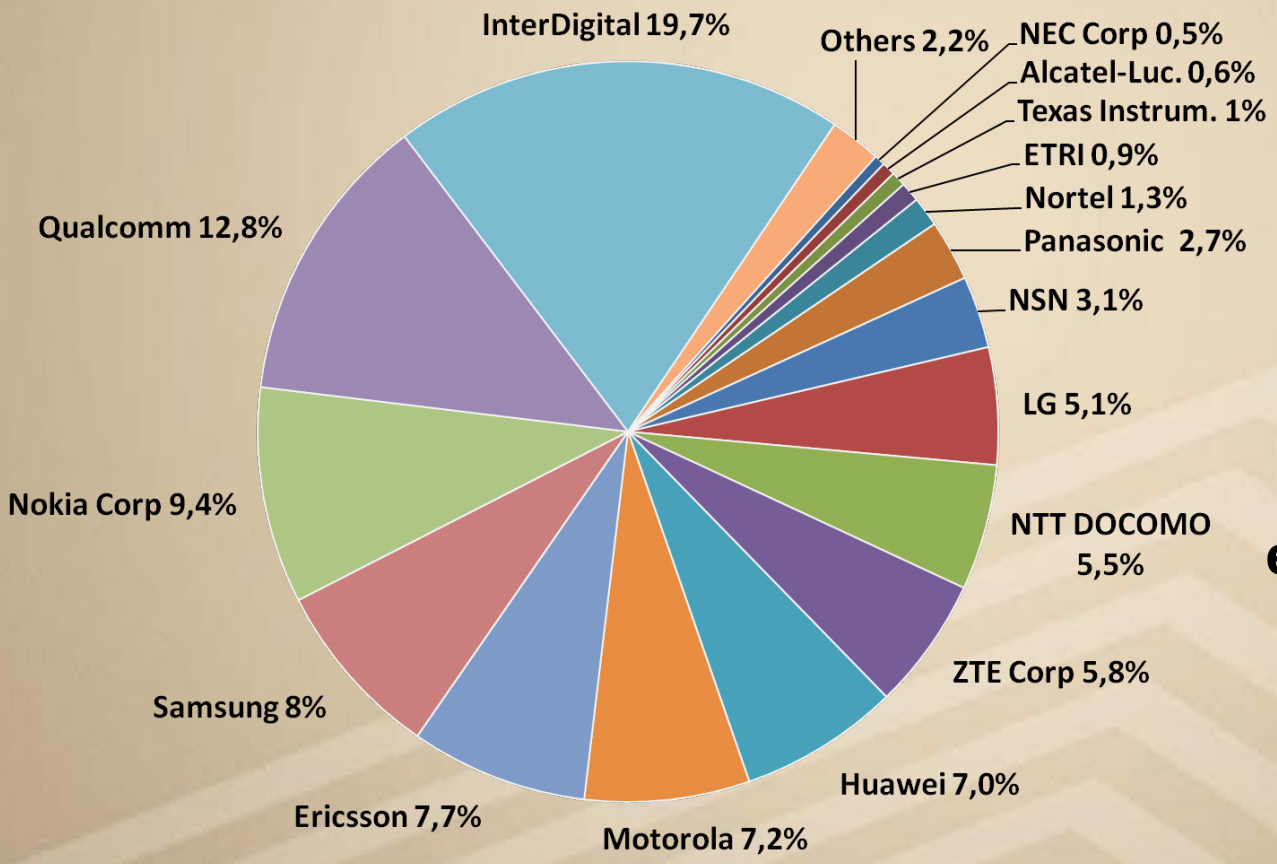
Patent Pools are not only for standards

- Patent Pools are considered pro-competitive when they include only complementary patents and no substitutes patents
- Complementary patents: patents that are required to produce the same product or carry out the same process
- Substitutes patents: patents that cover different and competing ways to produce a product or carry out a process
- Patents technically essential to a standard are, by definition, complementary
- There may be other criteria to include complementary patents in a patent pool

4. CASE STUDY: LTE

LTE/SAE Declarations to ETSI by PO

4076 declarations (March 2011)



Over 4.000
IPRs declarations

Not all will be evaluated as essential

LTE Royalty Rate Announcements: A Natural Experiment

- In April 2008, seven major telecommunications companies announced that "a reasonable maximum aggregate royalty level for [all] LTE essential IPR in handsets is a single-digit percentage of the sales price" (i.e., <10%)
  - This target of a single digit royalty level for all LTE essential patents has subsequently attracted support from other LTE stakeholders
- From 2007 to 2009, the NGMN Alliance conducted its "Trusted Third Party IPR Process" to obtain ex-ante anonymous disclosures of LTE licensing terms (including royalty rates)
- This situation offers a natural experiment to assess the potential impact royalty stacking in LTE

LTE Royalty Rate Announcements: Royalty Stacking Theory Validated

- To date, 10 companies have disclosed royalty rates for their LTE patents (including several of the original seven that had joined in the April 2008 announcement above)
- The sum of the royalty rates announced by those 10 companies as a single group is **14.8%**
- Even in this small group, the aggregate royalty rate would be higher than most of the group desired – and one of those 10 declared a rate of 0.00%

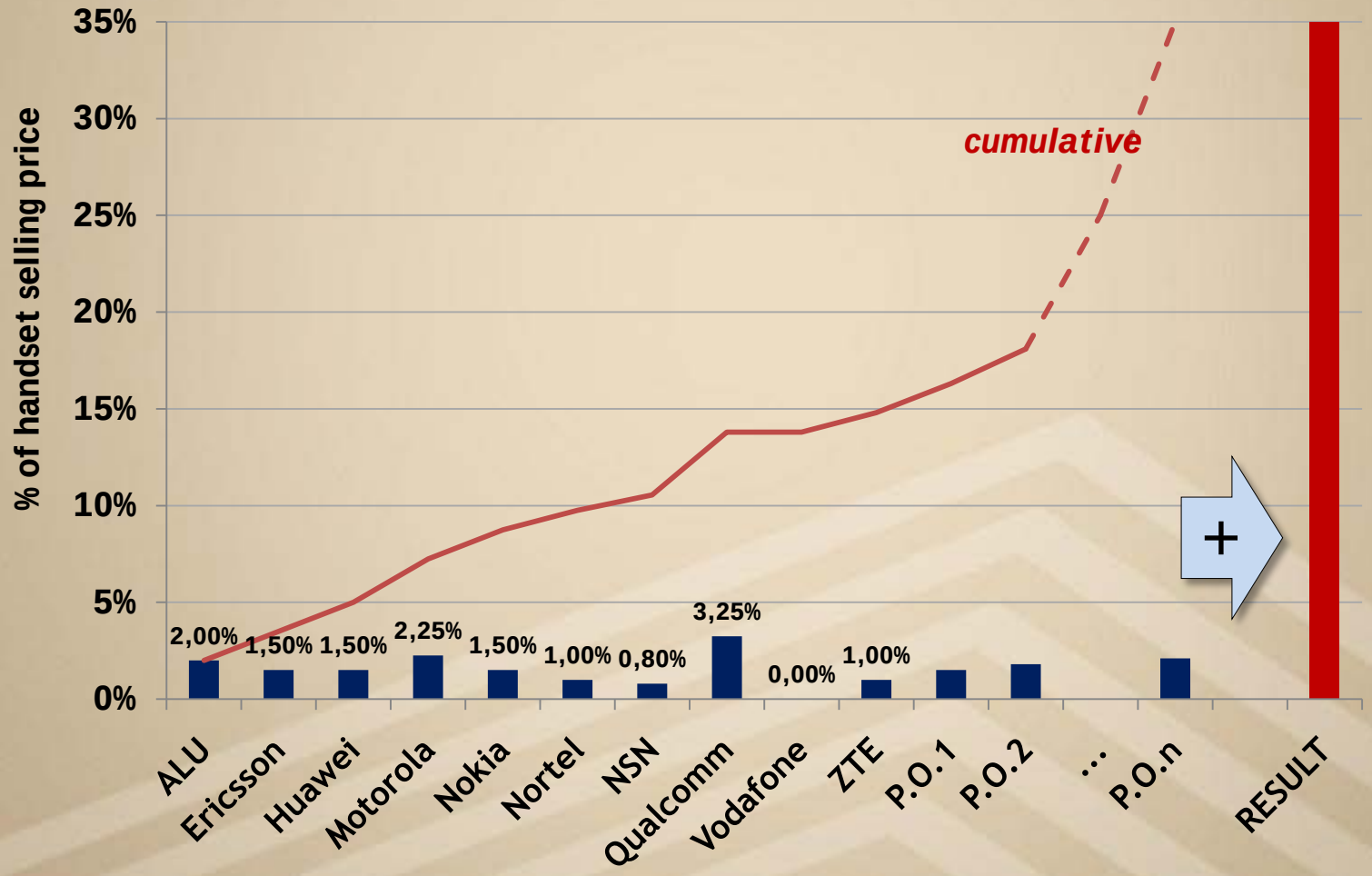
Royalty Stacking and Pools: Comparing Hypothetical Outcomes

The following graphs present several hypothetical scenarios (loosely based on potential developments in LTE) to illustrate the impact of patent pools on aggregate LTE royalties.

The rates indicated are included for purposes of discussion and comparison only. They are not intended to represent actual royalty rates under any of the scenarios presented.

LTE Royalty Level

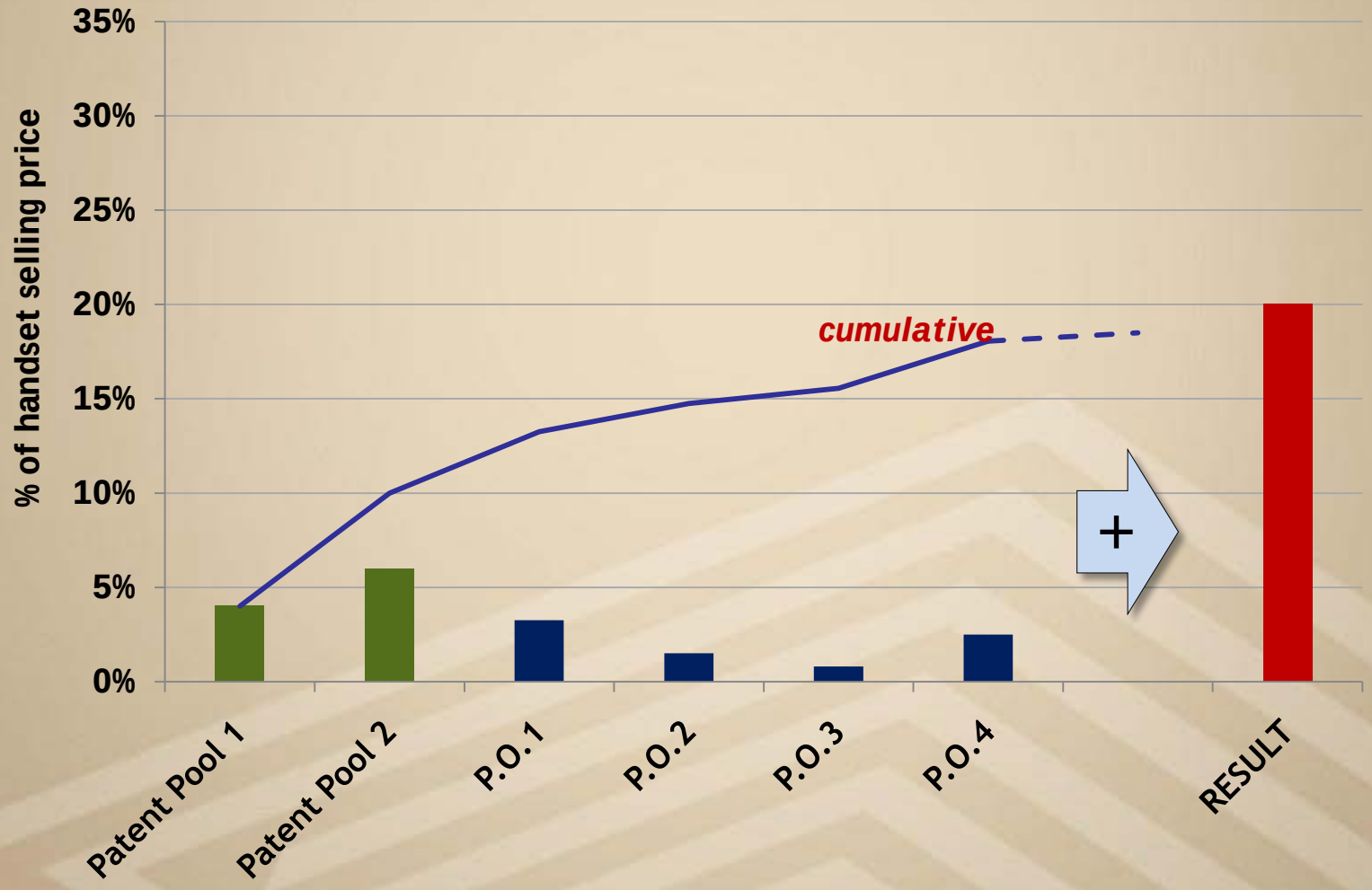
No patent pool – Possible Scenario
Based on Public Declaration and Sisvel's Assumption



This chart reports for some companies the "maximum" LTE desired royalty rate that have been publically declared by those companies

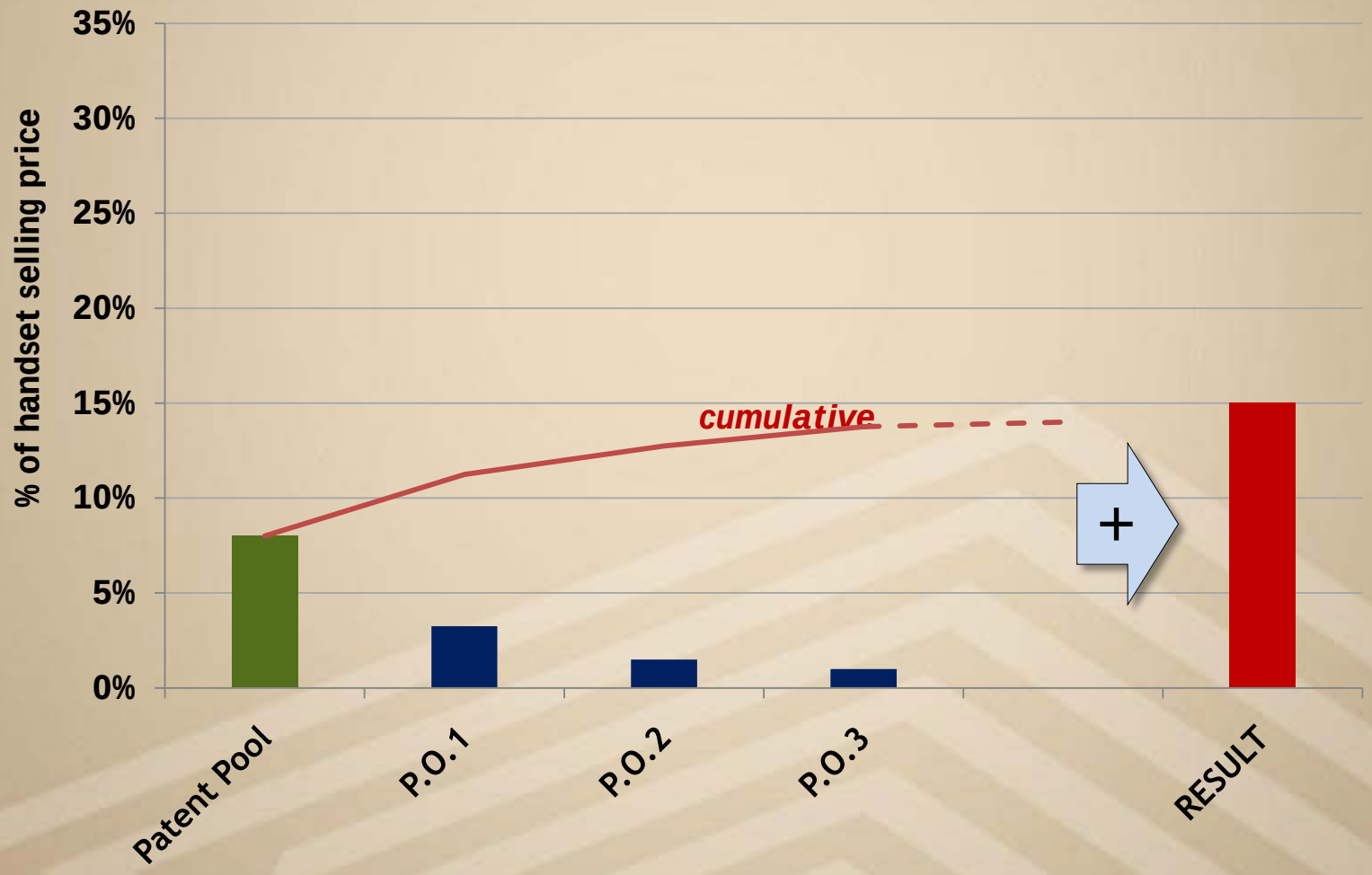
LTE Royalty Level

2 patent pools and outside patent owners

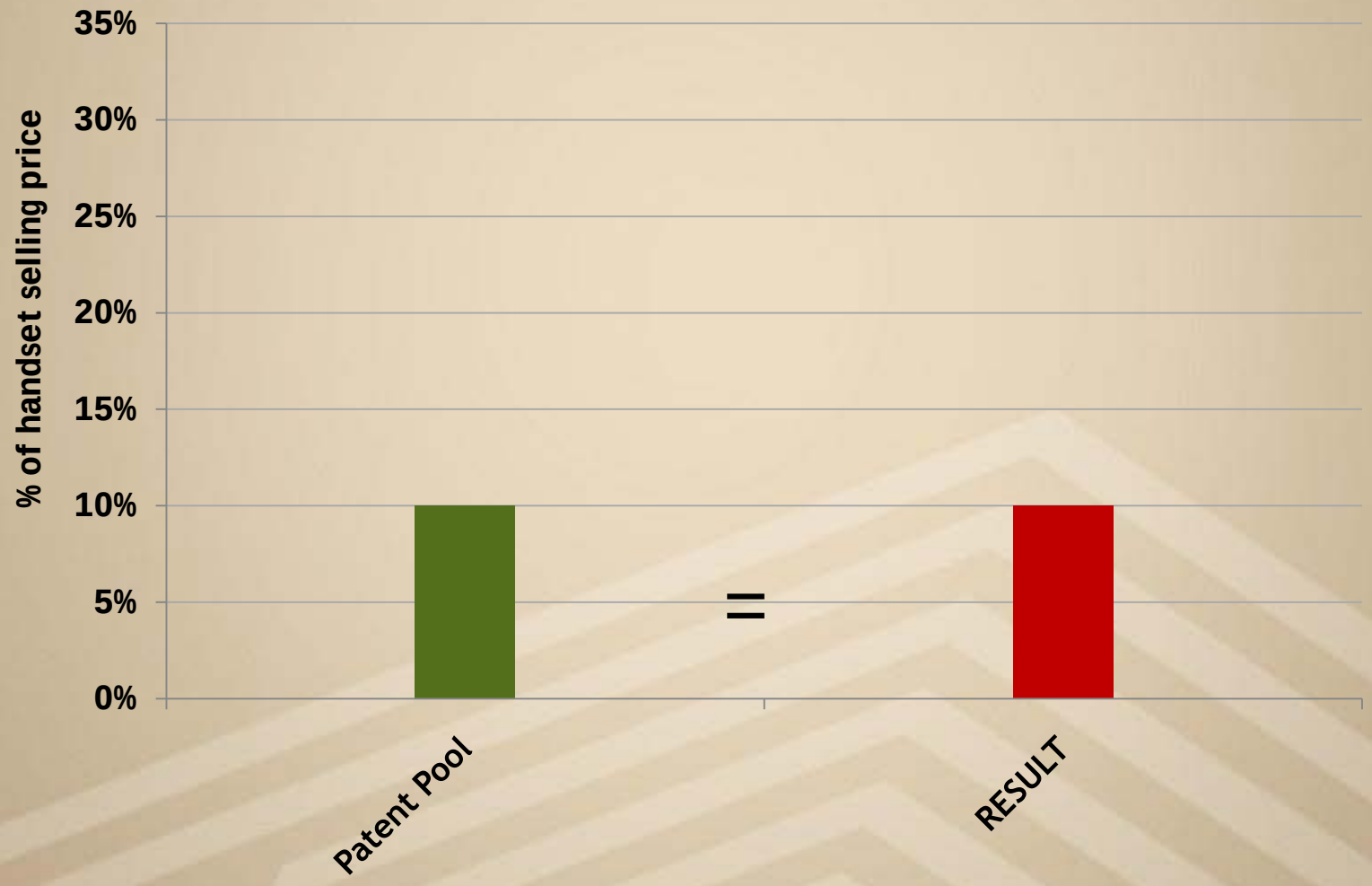


LTE Royalty Level

1 patent pool and outside patent owners



LTE Royalty Level
Ideal scenario



New wireless technologies must be interoperable to succeed

Interoperability leads to broad-based development and standardization (with many essential patents held by many parties)

Broad-based standards call out for patent pools

Competitions is also between Patent Administrators

- Patent Call **VIA LICENSING**
- Patent Call **MPEG LA**
- Patent Call **SISVEL**

Which is the solutions?

BEAUTY CONTEST

NGMN – Request for Information

14-15 October 2009, Vienna

LTE: Patent Pool Creation Facilitated by Sisvel

- Sisvel Launched a Patent Call for LTE in May 2009
- Over 30 Companies have been involved at different stages in Sisvel's Facilitation Representing about 2/3 of Declared Essential Patents
- First Meeting in Frankfurt in February 2010
- Six more meetings took place between February 2010 and today
- Two more meetings scheduled between now and July 2011
- Over 20 people in Sisvel's team involved in this process

5. Structuring a Successful Patent Pool

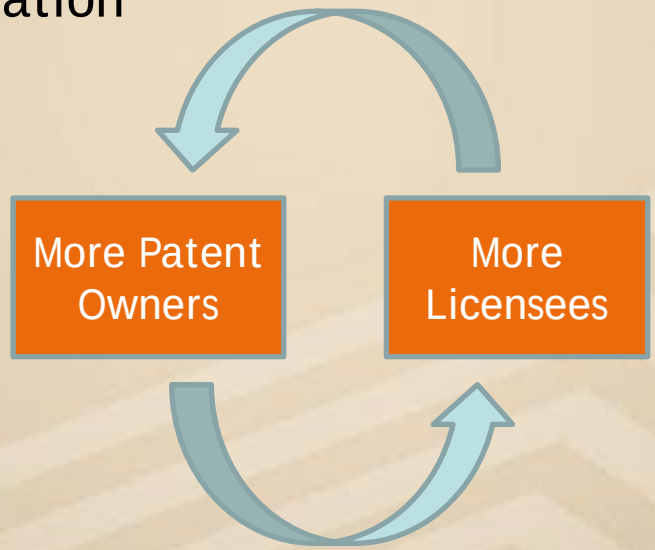
"One-size-fits-all" approach does not work

- Technologies and markets are constantly developing.
- An approach that was successful in one field, or geographical region, at one time may not always be the best alternative for every program.
- Need for tailor-made programs designed to maximize results while meeting patent owners' business and administrative needs.

E.g. European fiscal rules are different from the USA ones

Driving Pool Participation

- If patent owners representing a broad range of interests – and a broad patent portfolio – can be brought into the formation process, the pool may be able to achieve a value-based structure that will establish momentum to further increase participation



VIRTUOUS LOOP

Building a Successful Patent Pool
(1/2)

A successful pool needs to:

1. attract both large and small **Licensors** to reach **Critical mass** (in terms of participation and patent coverage)
2. offer all **Licensees** a compelling licensing solution

Building a Successful Patent Pool
(2/2)

LICENSORS

- Be attractive for all Licensors
- Adopt a simplified and transparent process
- Be administered by an independent administrator

LICENSEES

- Non-discriminatory licensing
- Enforcement and compliance mechanisms
- Administrative tools to enhance efficiency and make the reporting and payment process easy
- Royalty rate reflective of the technological value of the pool

The Challenge of Setting Royalty Rates

Two Methods

Traditional Method

Royalty Comes First

- Royalty rate is decided by the group
- Participants decide whether to join after royalty is set

Participation Method

Patent Owners Come First

- Participation negotiated with all members
- Pool royalty rate set as a result of the above negotiations

Royalty Sharing Mechanisms

- Numerous methods available, including:
  - Patent Points. Sharing based on patent use:
    - Revenues are allocated to each country in which there is coverage and then shared according to a point system based on patents owned
    - Country allocation can be based on data reported by licensees or on publicly available sales data
  - Equal Sharing. Royalties are allocated among the Patent Owners in equal parts
  - Mixed methods. Combination of Patent Points and Equal Sharing
  - Enforcement Premium. If an enforcement component is included, additional revenues can be allocated to Patent Owners that make patents available for enforcement

Traditional Royalty Sharing

Based on patent points

Revenues are allocated to each country in which there is coverage and then shared according to a **point system** based on patents owned

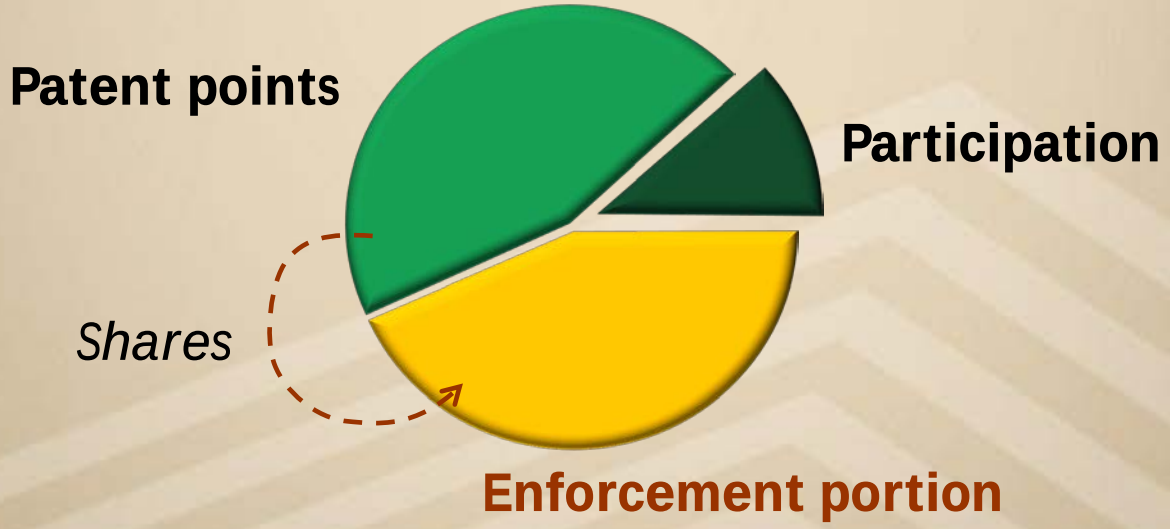
Based on participation

- Equally allocated to the core members
- Possible premium for pool **founding members**

Enforcement Premium: If an enforcement component is included, additional revenues can be allocated to Patent Owners that make patents available for enforcement (discussed later)

Enforcement premium

- Enforcement share is distributed only to the POs that give their availability for enforcement
- Each PO's share in this portion may be based on patent points



Improving Patent Pools: Better Enforcement and Compliance

- Enforcement and compliance are not only in the interest of patent owners, but also in the interest of all licensees to ensure that others do not gain an unfair advantage in the marketplace
- A patent pool with a mechanism to enforce its portfolio is more compelling for both patent owners and licensee
- An independent administrator can also ensure that enforcement is conducted in an even-handed manner

Which Skills Are Required From A Patent Administrator?

- Professionalism and Dedication
- True Independence
- Innovation in choosing the appropriate business model
- Efficiency and Effectiveness
- Global Presence and Perspective
- Technical Ability

The role of an independent administrator

The independence of the administrator (including the administrator's controlling shareholders) helps **safeguard patent pools from potential antitrust risk.**

- An independent licensing administrator has an interest in granting licenses, preventing POs to use the pool to disadvantage rivals in downstream markets.
- An independent administrator will prevent POs from exchanging information among themselves and from directly accessing licensees' sensitive business information.
- Licensing administrators that are independent from the PO and licensees have an interest in fostering pools in full compliance with the law.

Patent pool formation: timing

- A speedy facilitation phase increases the chances that the technology will be widely adopted
  - Early publication of Royalty Rates and Royalty Structure allow companies to know in advance the cost of related IP and will allow the Administrator to effectively promote adoption of the standardized technology by the industry
- Time needed to establish pool largely dependent on:
  - Frequency of facilitation meetings
  - Ability of each Patent Owner's representative to approve decisions of the facilitation group
  - Willingness of Patent Owners to compromise on key issues, such as royalty rates and sharing mechanisms

How to identify potential essential POs?

Trough Patent Owners Self Declarations to SSOs:

- Public Declarations, often contained in organized Databases
- Companies declaration policy differ from case to case

Trough Specialized IPR landscape studies:

- Often not public and costly
- Results depending on the level of professionalism and competency of the entity performing it

Trough Patent Analysis Automatic Tools:

- Independent from human judgment
- Initial Investment needed for tool development and testing

Project to crate a Tool for Essential Patents Identification

Tool to assign to each patent a probability that is essential to a standard trough an algorithm based on:

- Semantics analisys
- Statistical analisys of the charecteristics of the patent
- Statistical analisys of the charecteristics of the company that creates the patent

Project Partners:

- University of Bocconi - Prof. Gambardella
- Sisvel Technology

How Institutions, R&D centers and SSOs could foster the creation of patent pools?

- Participating to the development of the Automatic Tool to identify essential patents
- Identifying patents/patents owners having commercial/essential patents on different technologies
- Promoting the benefit of Patent Pools among those Patent Owners
- Encouraging the assembling of Patent Owners and supporting the formation of a Patent Pool by a European Independent Administrator

6. QUESTION AND ANSWERS

Thank You

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