

JFTC CPRC Osaka International Symposium

IPRs and Competition Laws in the IoT/AI Era

30 March 2018

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KYOCERA Corporation

1. Our business
2. Standards and patents
3. Licensing negotiation issues that relate to standard essential patents (SEPs) in the telecom sector
4. Licensing negotiation issues that relate to the Internet of Things (IoT) SEPs

1 . Our Business

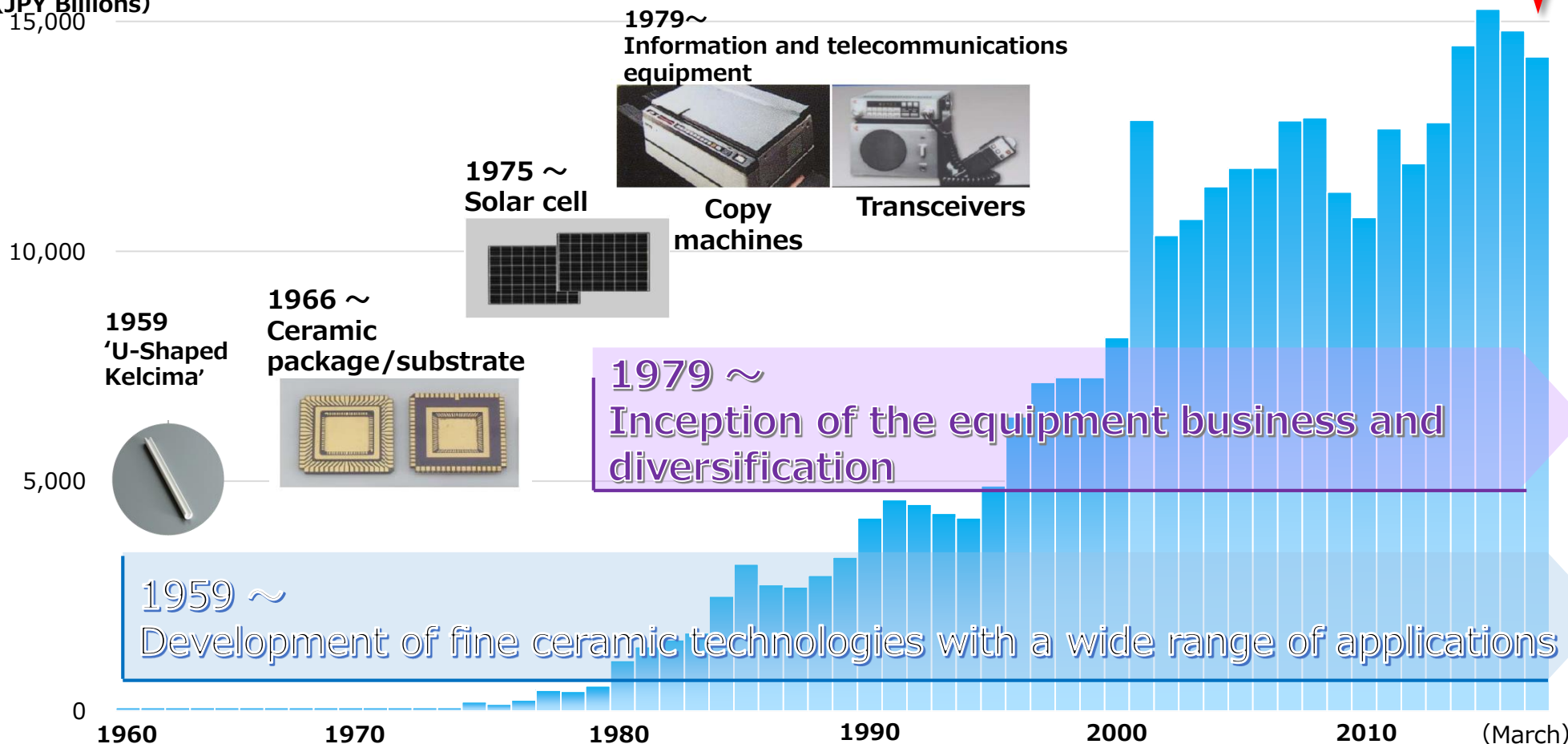
Our Business

Established: 1 April 1959
Group companies: 231 companies※
Number of employees: 70,153※

Consolidated sales
for March
2017

**1,422.8
billion yen**

(JPY Billions)
15,000



Our Business



Equipment and systems 51.0%

Living and environment



Document solutions



Communication



Other

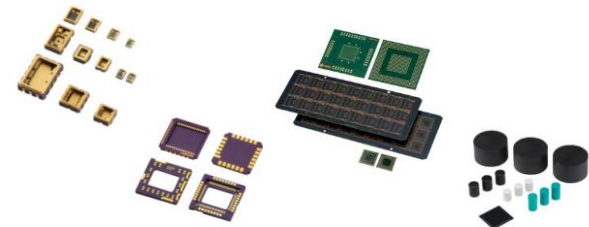
△1.4%

Parts 50.4%

Industrial and automotive parts



Semiconductor parts



Electronic devices



Sales
1,422.8 billion
March 2017

22.8%

10.5%

16.2%

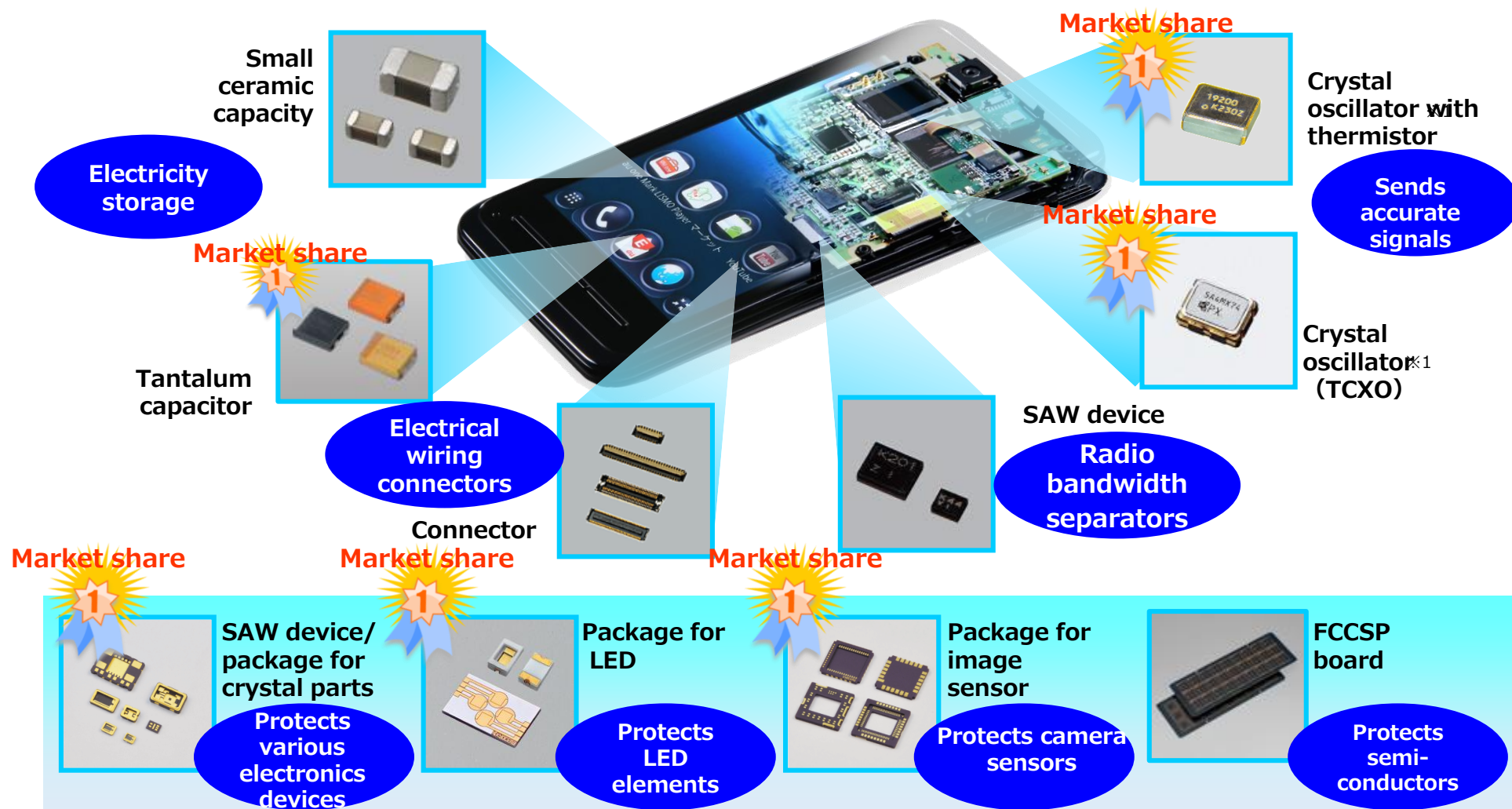
17.3%

16.9%

17.7%

In the Information Communications Market: Smartphone Parts

Globally, we are the largest supplier in many product markets



In the Automobile Market

We have the largest global market share in the greater number of markets for automobiles

Improves diesel engine fuel efficiency;
suppresses hazardous substances in the exhaust

Market Share



Piezo-stack

Market Share



Ceramic glow plug

Environment

Ensures safety

Safety



Camera module



Heads-up display

Cuts metal



Cutting tools



Energy saving

Information processing

Contributes to energy conservation with LED headlights

Market share



Package for LED



Liquid crystal display



Connector

Market share



Tantalum capacity



Crystal oscillator



Power device

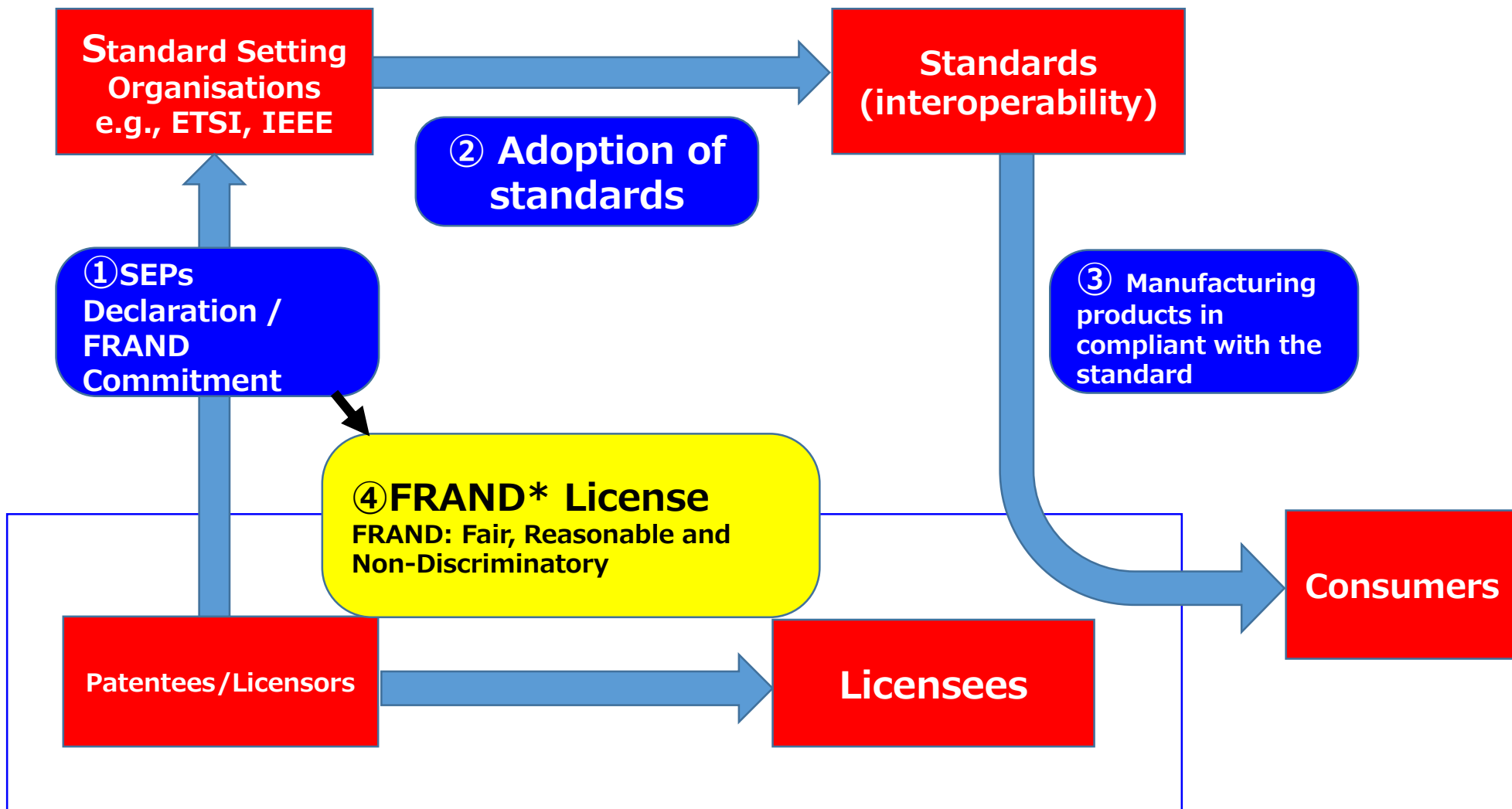


Communication module

Various parts are meeting automobile needs with more advanced electrical equipment

2. Standards and patents

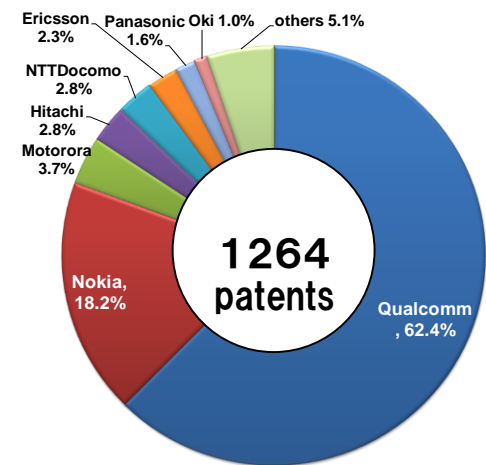
Standards and patents



3. Licensing negotiation issues for SEPs in the telecom sector

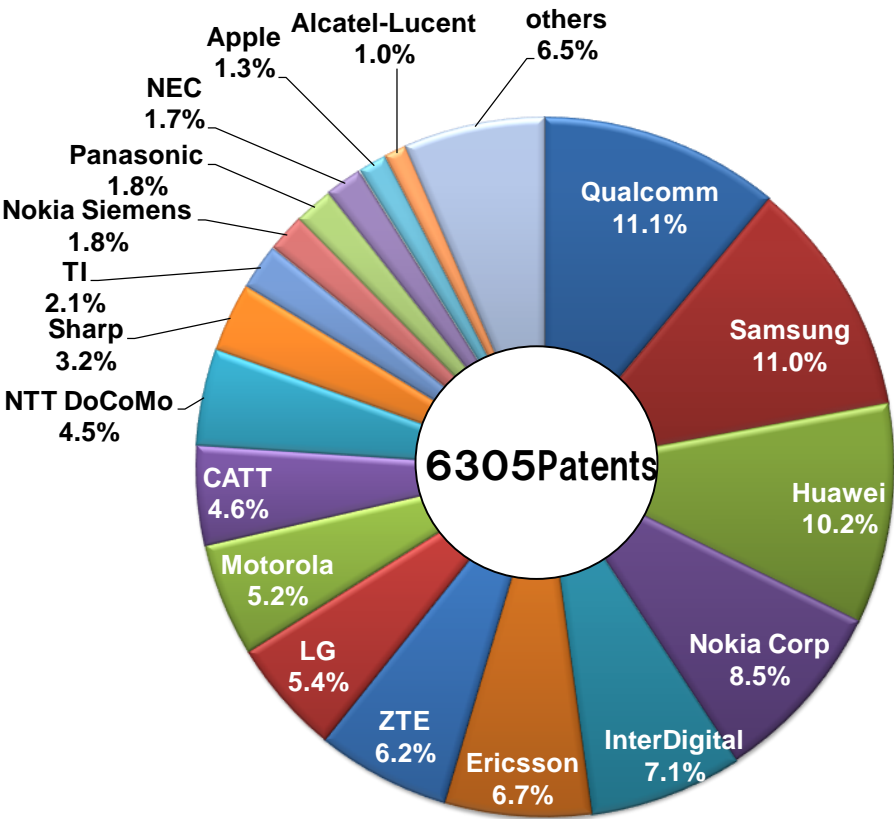
Number and distribution of telecom standard SEPs with FRAND declarations

CDMA2000 (ARIB)



ARIB IPR Search (As of December 2013)

LTE (ETSI)



Cyber Research Laboratory Co., Ltd, 'Study report on the LTE Related ETSI Essential Patent as declared' Ver. 3.0 (June 2013)

Royalty rate for LTE standards

Per the current case law, the royalty rate for LTEs is 6–8% (single digit)

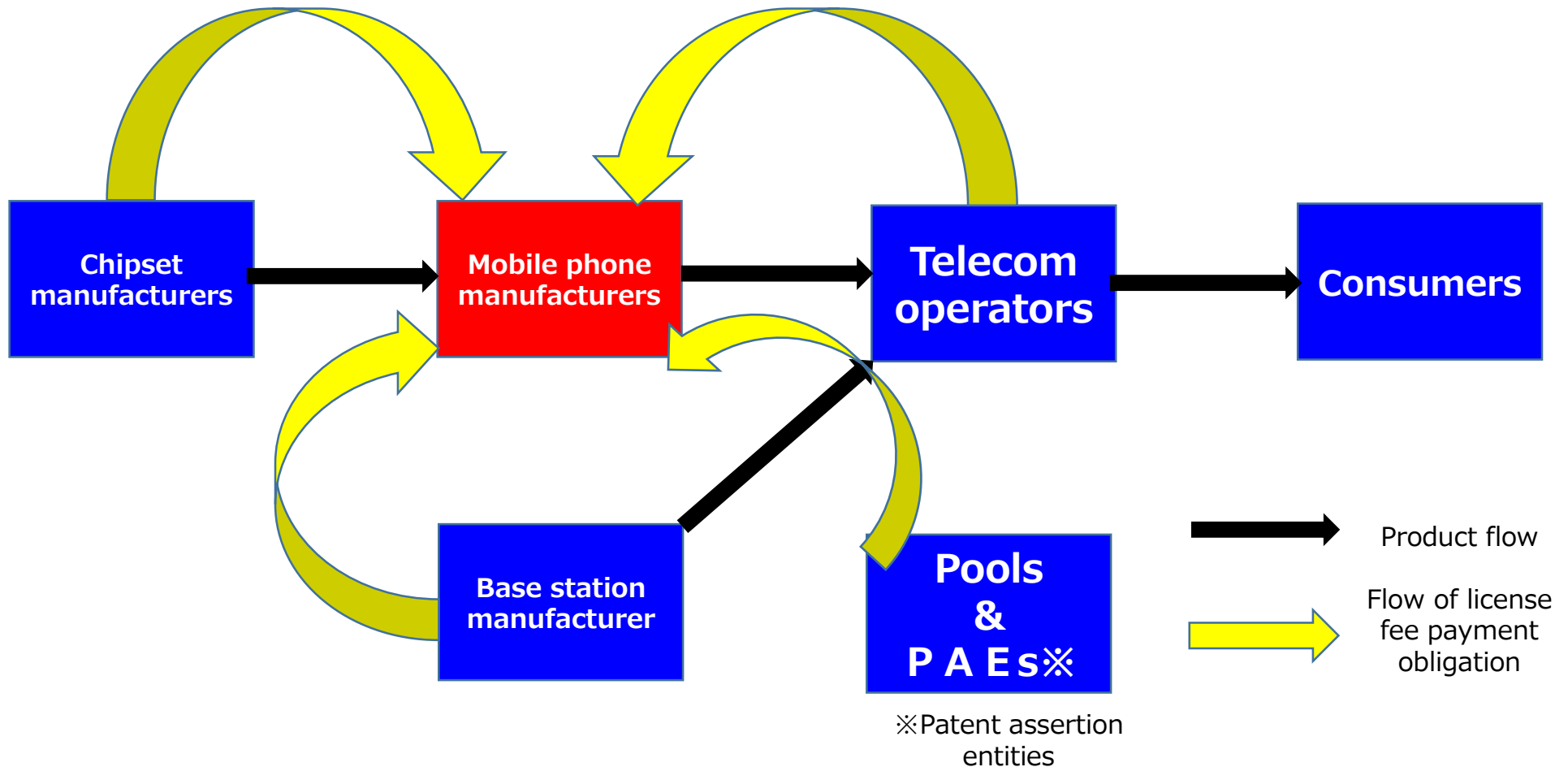


Announced royalty rate by major SEP holders; the aggregated rate is 15% (see chart)

SEP holder	Royalty Rate %
Qualcomm	3.25
Nokia	1.5
Nokia-Siemens	0.8
Ericsson	1.5
Nortel	1.0
Huawei	1.5
ZTE	1.0
Motorola	2.25
Alcatel-Lucent	2.0

Source: les Nouvelles (September 2010) *Royalty Rates And Licensing Strategies for Essential Patents on LTE (4G) Telecommunication Standards*

License fee burden



The number of mobile phone manufacturers in Japan decreased from 11 companies in 2000 to 3 companies

License negotiation: Behind the scenes

Inadequate license offer from SEP owners (lack of transparency)

1) Insufficient evidence to prove infringement

- Standard setting organisations (SSOs) evaluate neither the essentiality nor the importance of the FRAND declared patents.
- SEPs may cover both mandatory and optional.
- SEP owners often fail to prove that the product at issue infringes on the patents at issue.

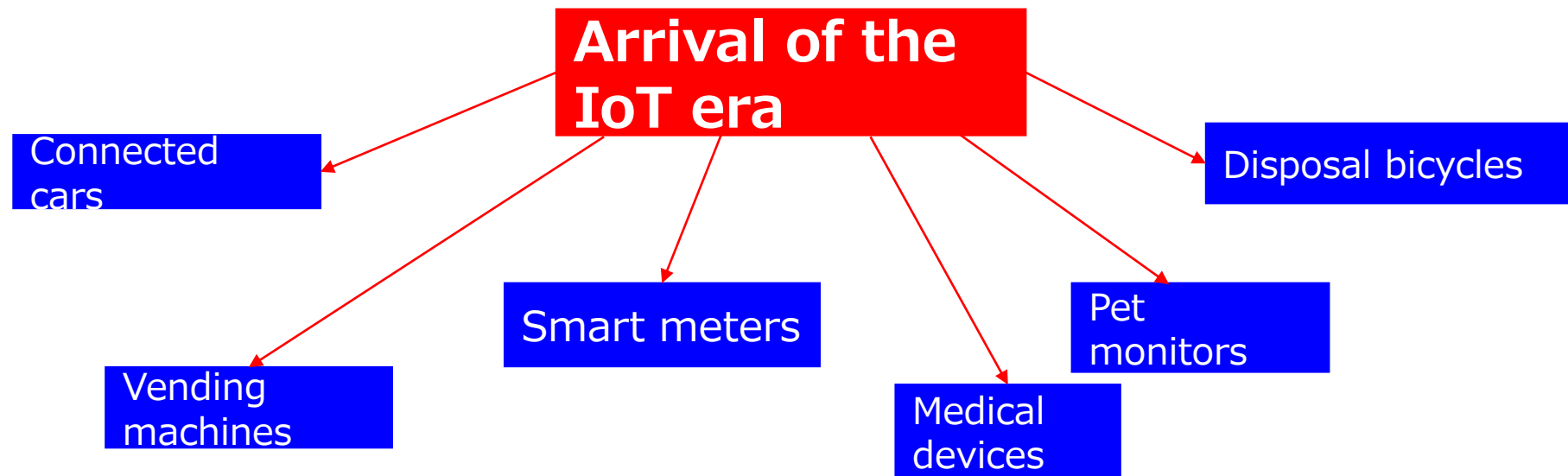
2) Lack of concrete explanation for the royalty rate request

- SEP owners refuse to offer concrete detailed explanation and reason for why they require the royalty rate; they merely state that other licensees have accepted it.

3) Duplicate licensing request for patents that were originally derived from the same owner

- Patent pools to which the SEP owners entrust licensing businesses request a license fee payment.
- Additionally, the SEP owner himself/herself requests a license fee payment.
- Some of the SEPs are owned by various PAEs, and they all request a license fee payment.

4. Licensing negotiation issues related to the IoT SEPs

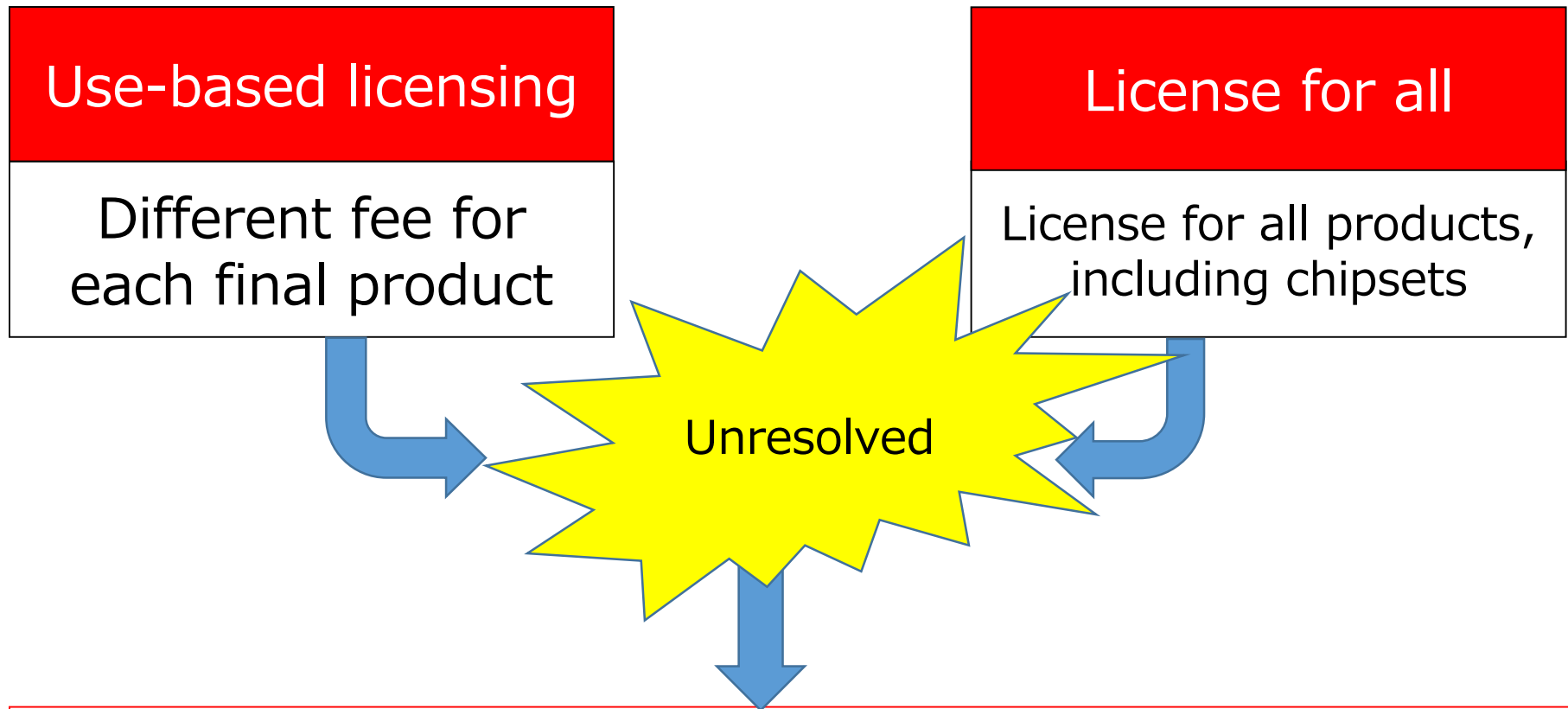


Rapid and widespread for various applications

Issue 1 : How much should be charged for the communication standard SEP license?

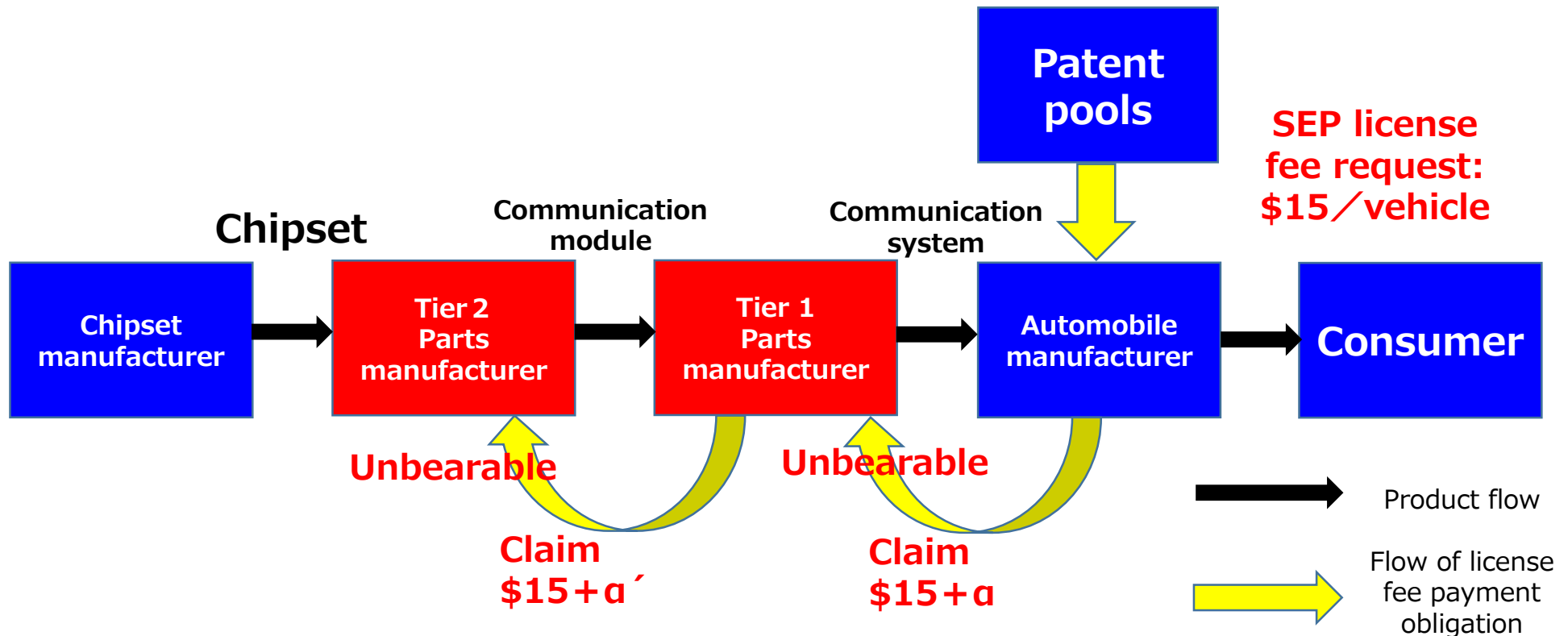
Issue 2: Who should bear the cost ?

Issue 1: How much should be charged for standard communication SEPs license?



The SEP owner should publish on his/her website a calculated basis for his/her license fee request to avoid confusion.

Issue 2: Who should bear the cost ?



A manufacturer in the supply chain cannot bear the license burden alone because it would risk the continuity of its business. There should be an upper limit for the royalty rate, which should be calculated based on each company's sales of the licensed product