



IPEG-40

Research Results on Standard-Essential Patents

Chinese Taipei



What is an SEP?

Technological Inventions

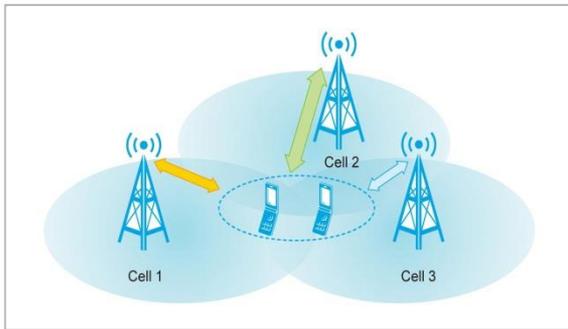


Figure 2. Schematic diagram of CoMP.

Patent

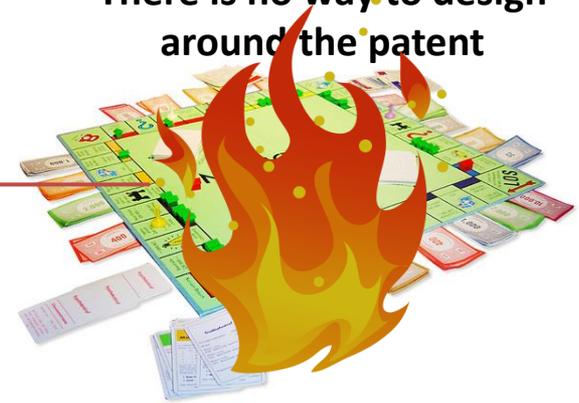
Standard

(3GPP standard development organization)



Standard-Essential Patents

There is no way to design around the patent



✓ FRAND licensing

➤ Global Litigation

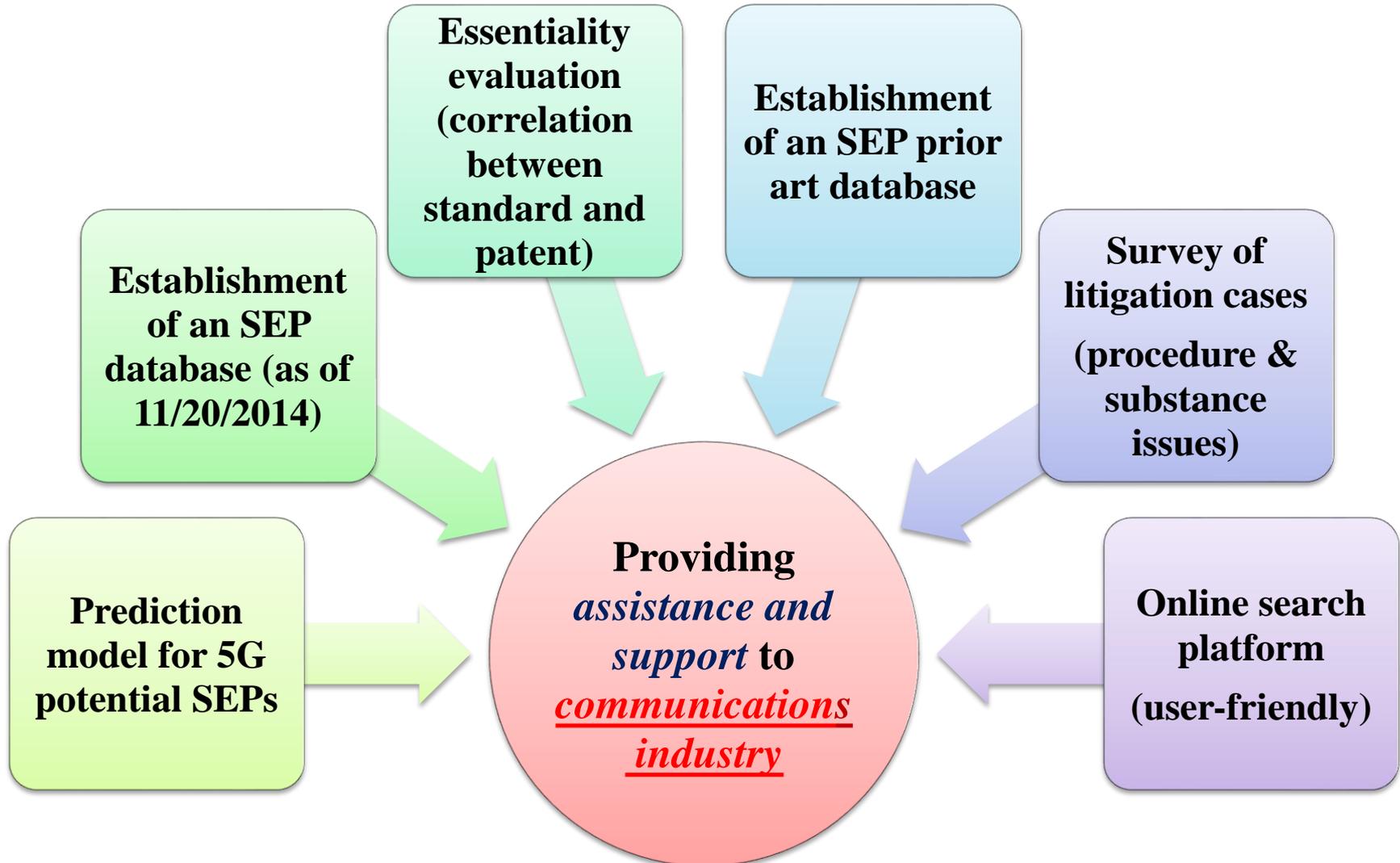
- HTC v. Apple
- Microsoft v. Motorola
- Patent Trolls

*LTE (Long-Term Evolution)

*SEP (Standard-Essential Patent)

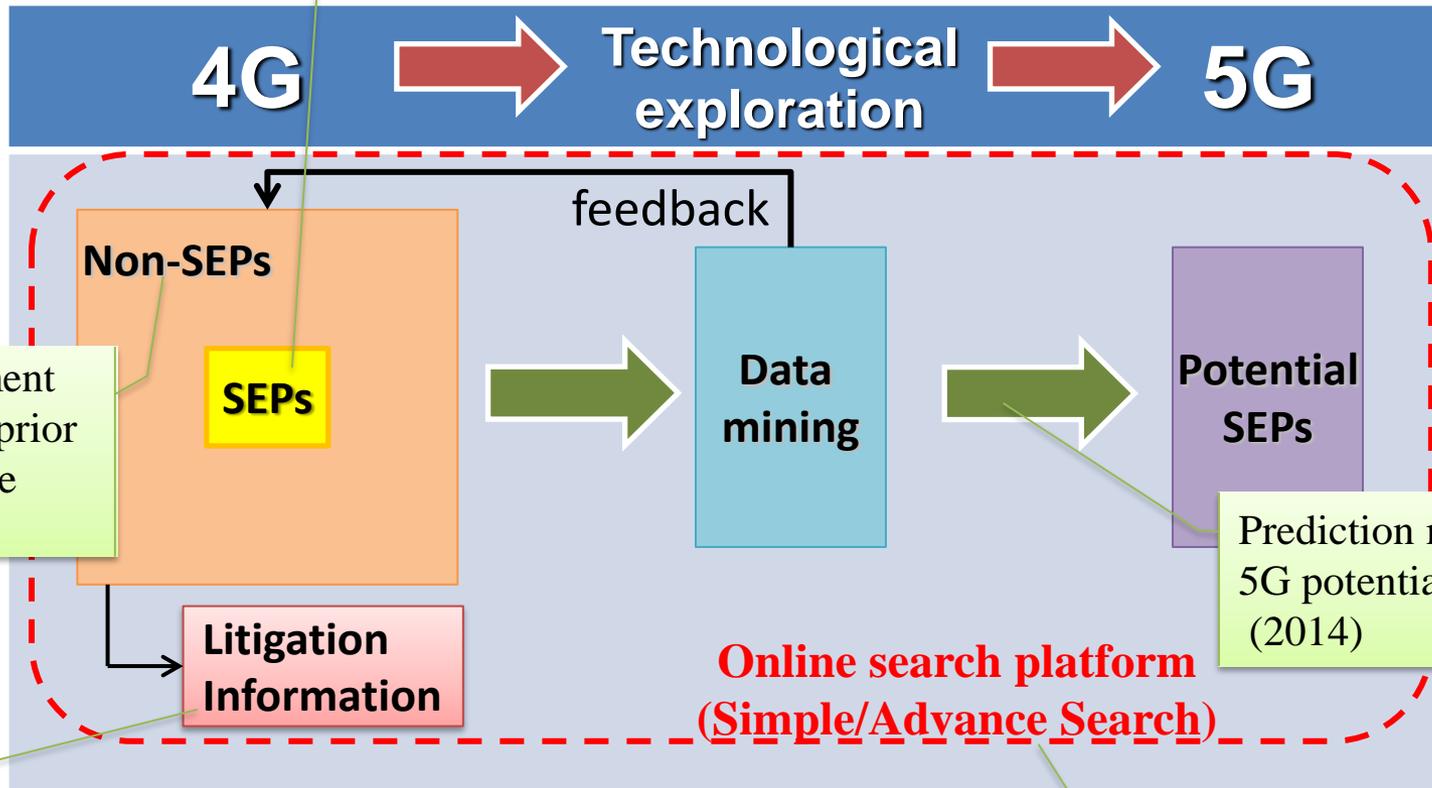
*ETSI (European Telecommunications Standards Institute)

*FRAND (Fair, Reasonable, And Non-Discriminatory)



3-Year Research

A total of 6,200 ETSI-declared 3GPP/LTE SEPs have been analyzed (2013, 2014) and 2,000 newly-declared SEPs (as of 11/20/2014) will be included (2015)



Establishment of an SEP prior art database (2015)

Prediction model for 5G potential SEPs (2014)

Study on 14 litigation cases (2013, 2014)
145 lawsuits will be surveyed (2015)

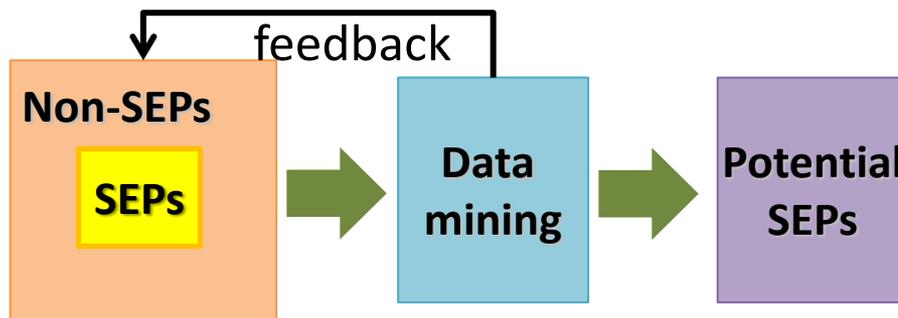
User interface (2015)

SEPs

- ETSI-declared 3GPP/LTE SEPs that are also filed in the US
 - Different aspects of analysis (e.g. company, year, LTE specifications, technology, product, performance, etc.)
 - Data completeness

Non-SEPs

- Prior art database for SEPs
 - CPC-specification concordance table
 - Around 300,000 non-SEP patents will be collected

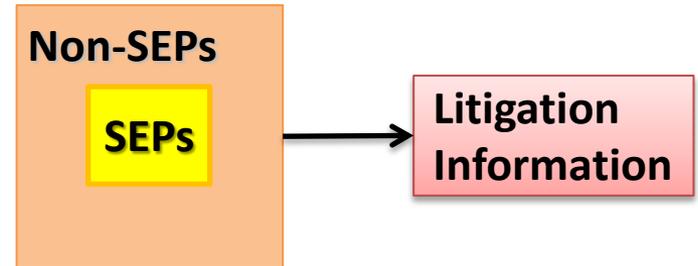


- Prediction model

$$Y = C_1 * Y_{pc} + C_2 * Y_{gr} + C_3 * Y_{do} + C_4 * Y_{rc} + C_5 * Y_{bc} + C_6 * Y_{mc} + C_7 * Y_{sp}$$

➤ Study on 14 litigation cases

- Apple v. Motorola (3:10-cv-0662, 1:2011-cv-08540)
- InterDigital v. Nokia (337-TA-613)
- **HTC** v. Apple (337-TA-808)
- Csiro v. **Acer** (6:2009-cv-00401)
- Apple v. **HTC** (HC11C03080、HC11C02703、HC11C02826)
- **Realtek Semiconductor** v. LSI Corp. (5:12-cv-03451)
- Ericsson v. **D-Link** (6:10-cv-00473)
- Samsung v. Apple (337-TA-794)
- Wi-LAN v. **HTC** (2:11-cv-00068)
- Apple v. Samsung (平成23年(ワ)38969号)
- ...



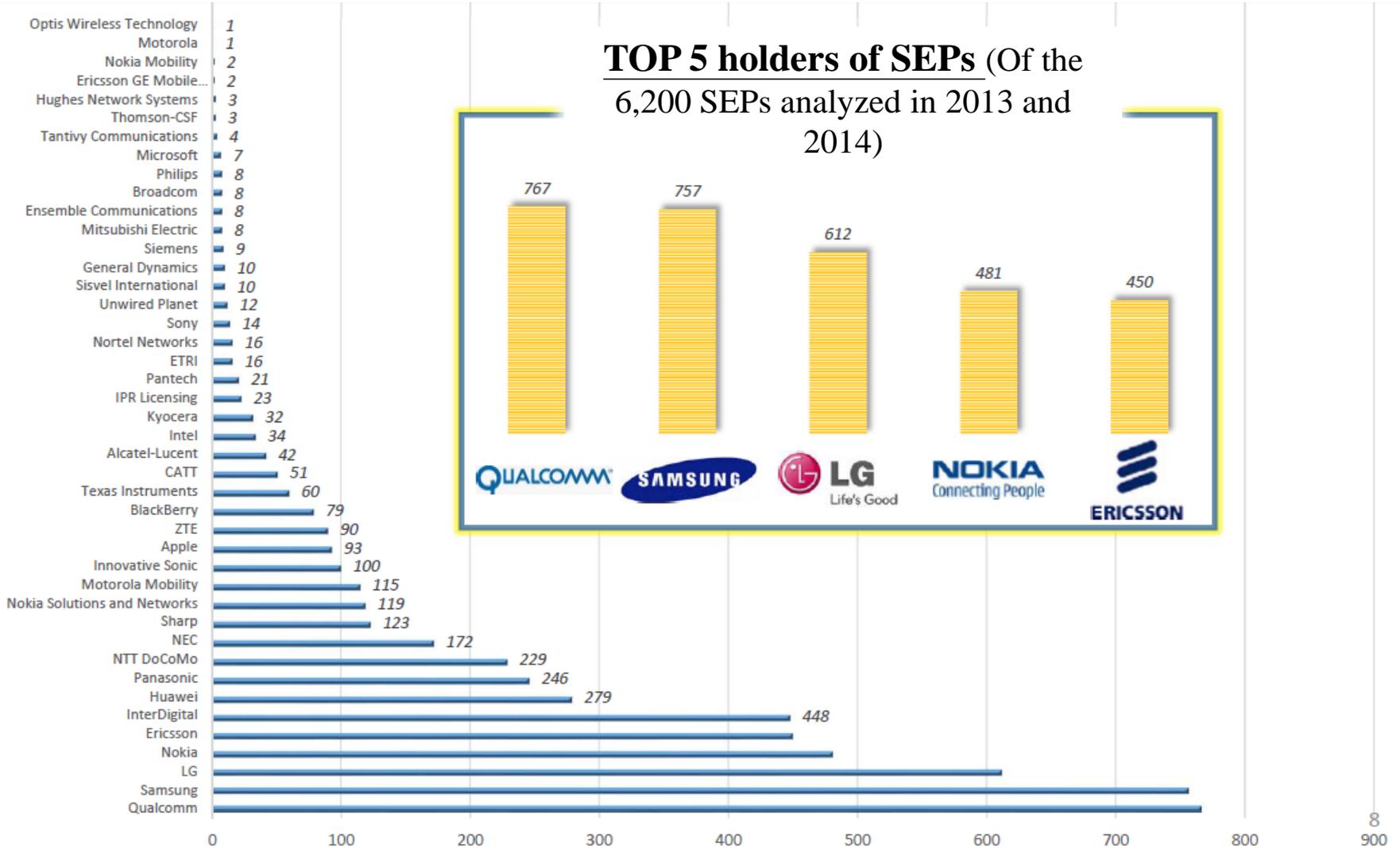
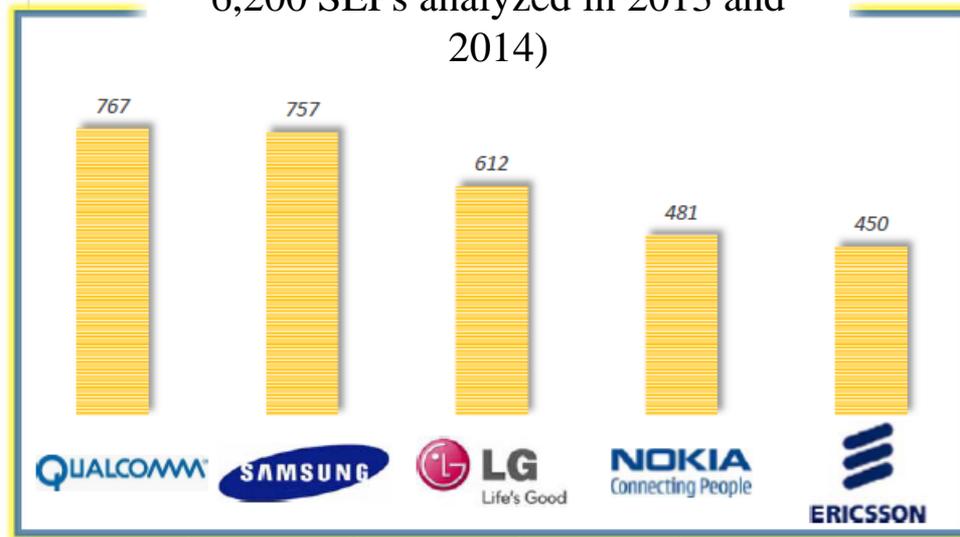
➤ 145 lawsuits will be surveyed

- A total of 67 SEPs are involved within the 6,200 SEPs

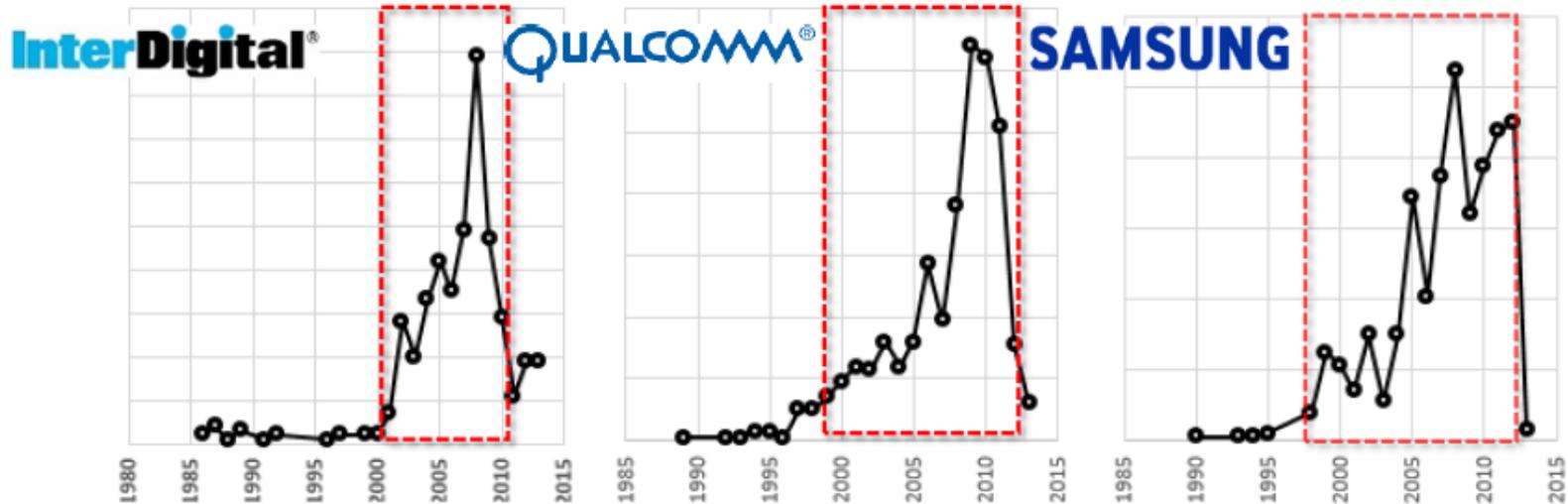
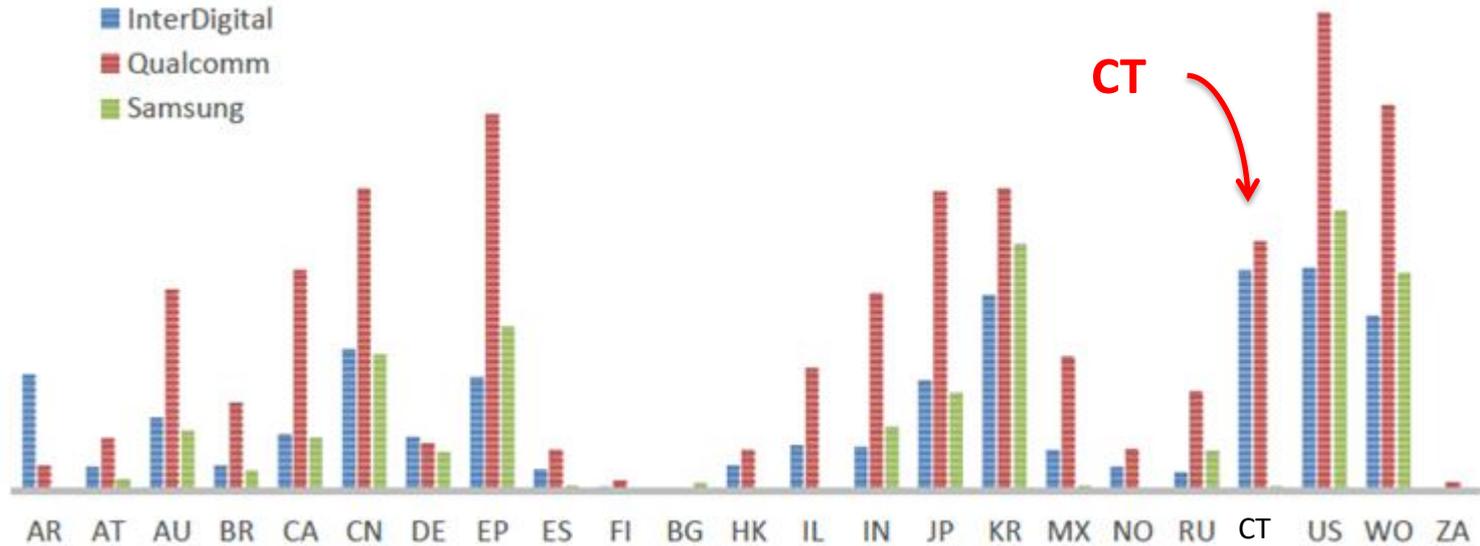


Analysis of SEPs – TOP 5 Holders

TOP 5 holders of SEPs (Of the 6,200 SEPs analyzed in 2013 and 2014)



TPO Analysis of SEPs – Patent Portfolios





Essentiality Evaluation

Company	Patent Number	TS spec.	Correlation Score
ZTE	20120263097	TS36.216	TS36.216/7.2 (41.5)
Samsung	8155100	TS36.211	TS36.211/5.5 (888.5) ; TS36.211/6.2 (283.0) ; TS36.211/6.10 (202.5)
Samsung	7952991	TS36.211	TS36.211/6.10 (520.0) ; TS36.211/5.5 (334.0) ;

Correlation Score
(machine calculation)

YES/NO

(expert identification,
by name)

Conclusion

Is the patent technically essential to 3GPP-LTE?

- Yes (Please write down the corresponding TS version, chapters, paragraphs, and figures in the “Comments” section.)
- No

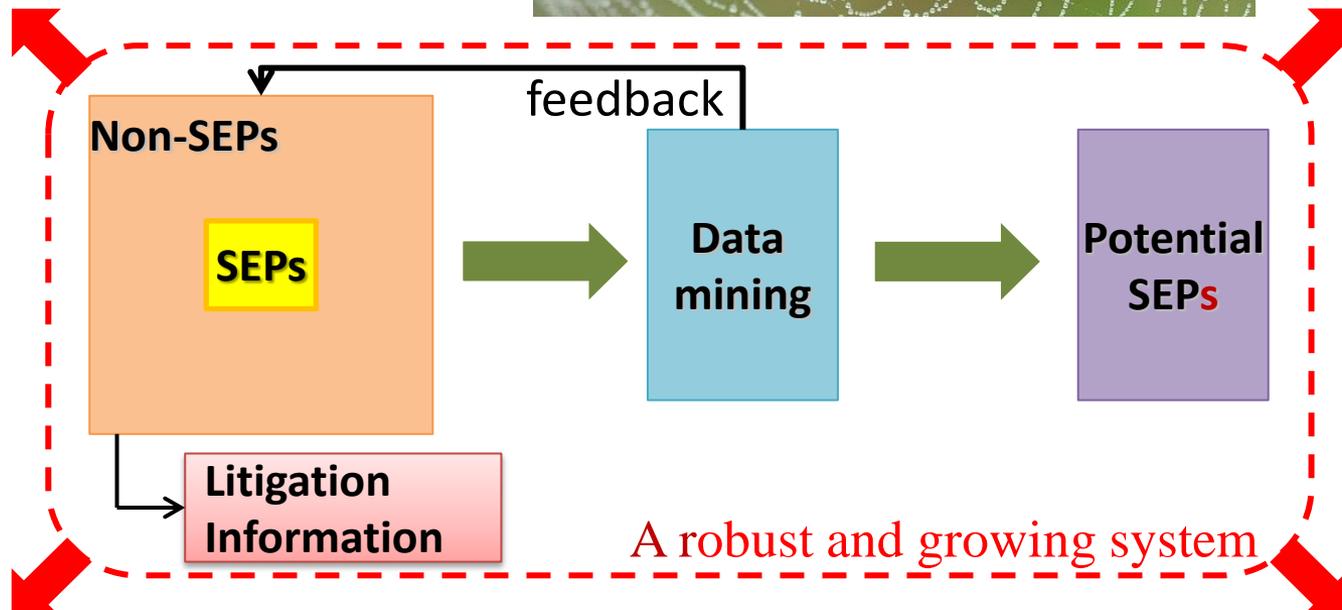
Comments:

TS 36.211/5.5 version 12.3.0
Paragraph 2~4, figure 5.5.1

- Online search platform
 - Regularly updated



Information network





Research Findings

<http://tiponet.tipo.gov.tw/TipoMenu/>



Thank you

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