

The market for SEPs

Evidence from European data

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Introduction

- “Standard essential patents” cover standard specifications
 - Fast growing number in ICT (Simcoe, 2005)
- As such, SEPs are different from ordinary patents
 - Value proceeds from standard adoption
 - “timely” declaration + FRAND licensing
 - Underlying technology is public information
- Recent but serious anecdotal evidence of SEPs trading activities
 - Nortel, Motorola, NPEs
 - US in the spotlight

Questions

- What about SEP trading in Europe?
 - Volume, trend
- Motives for trading SEPs?
 1. Prevent holdup and royalty stacking (Shapiro, 2001)
 - “Pooling”: should work only when SEP concentration is limited
 - Landscape cleaning by large SEPs owners
 2. Quick IP monetization for large SEP holders
 - Opportunity for outsiders: new entrants, NPEs
 - They build stronger IP positions for (cross-)licensing
- Timing of SEPs transfers: an open market?
 - SSO participants have an information advantage
 - Standard release and SEP declarations reduce information asymmetries

Outline

1. Data sources
2. Measuring the market for SEPs
3. Impact on standards
4. SEP declarations

Data sources

- Reassignments at EPO and INPI from 1997 to 2009
 - EPO: EP applications + 9 months after grant
 - INPI: National route + other granted EP patents validated in France
- SEP declarations from 5 major SSOs
 - ETSI, JTC1, ITUT, IEEE, ISO
 - PERINORM database of technical standard specifications
- On-going extension:
 - EPO and INPI reassignments in 2010-11
 - New ETSI database of SEPs declarations

Data (cont')

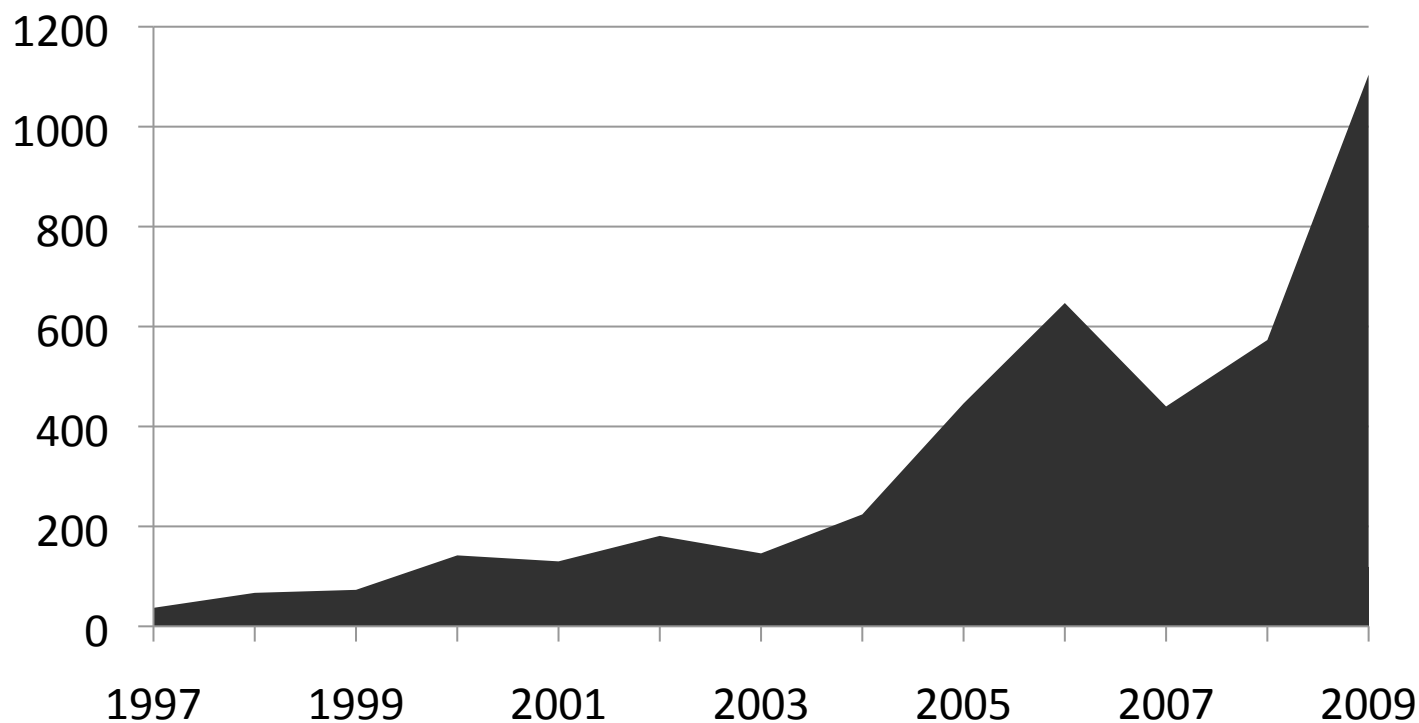
- SEP declarations are strategic
- Reassignments may not be systematic, and cover different operations
 - Bare transfers, M&A, intra-group transfers, change of name

Main steps:

- ✓ Match declarations & reassignments: DocDB + Patstat
 - ✓ Name harmonization and consolidation
 - ✓ Check transactions => keep « bare » patent sales and acquisitions
 - ✓ Check consistency with SEPs declarations
- Few observations at this stage
 - 341 patents; 617 patent-standard pairs

MEASURING THE MARKET FOR SEPS

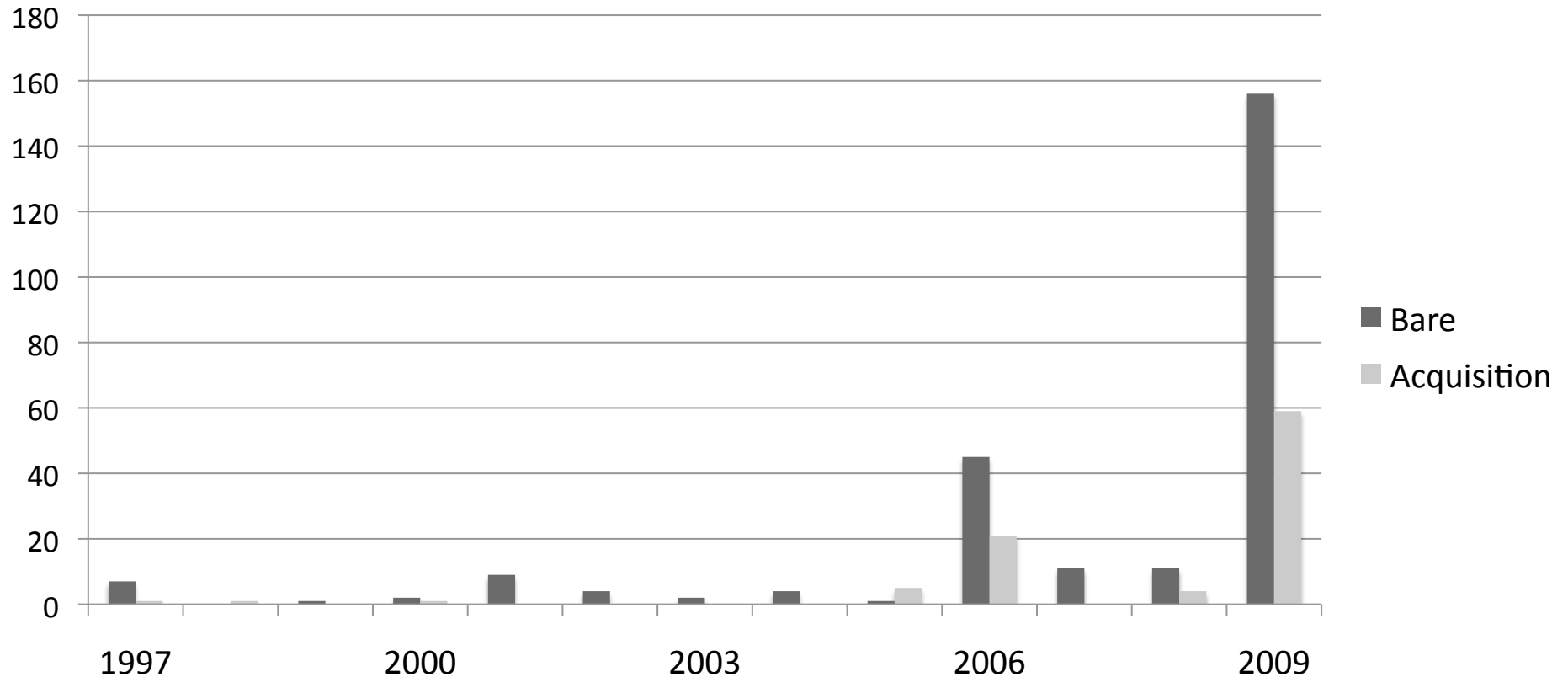
Sales of European patents in the Telecom industry 1997-2009



2,410 “bare” sales of (high quality) patents over the period.

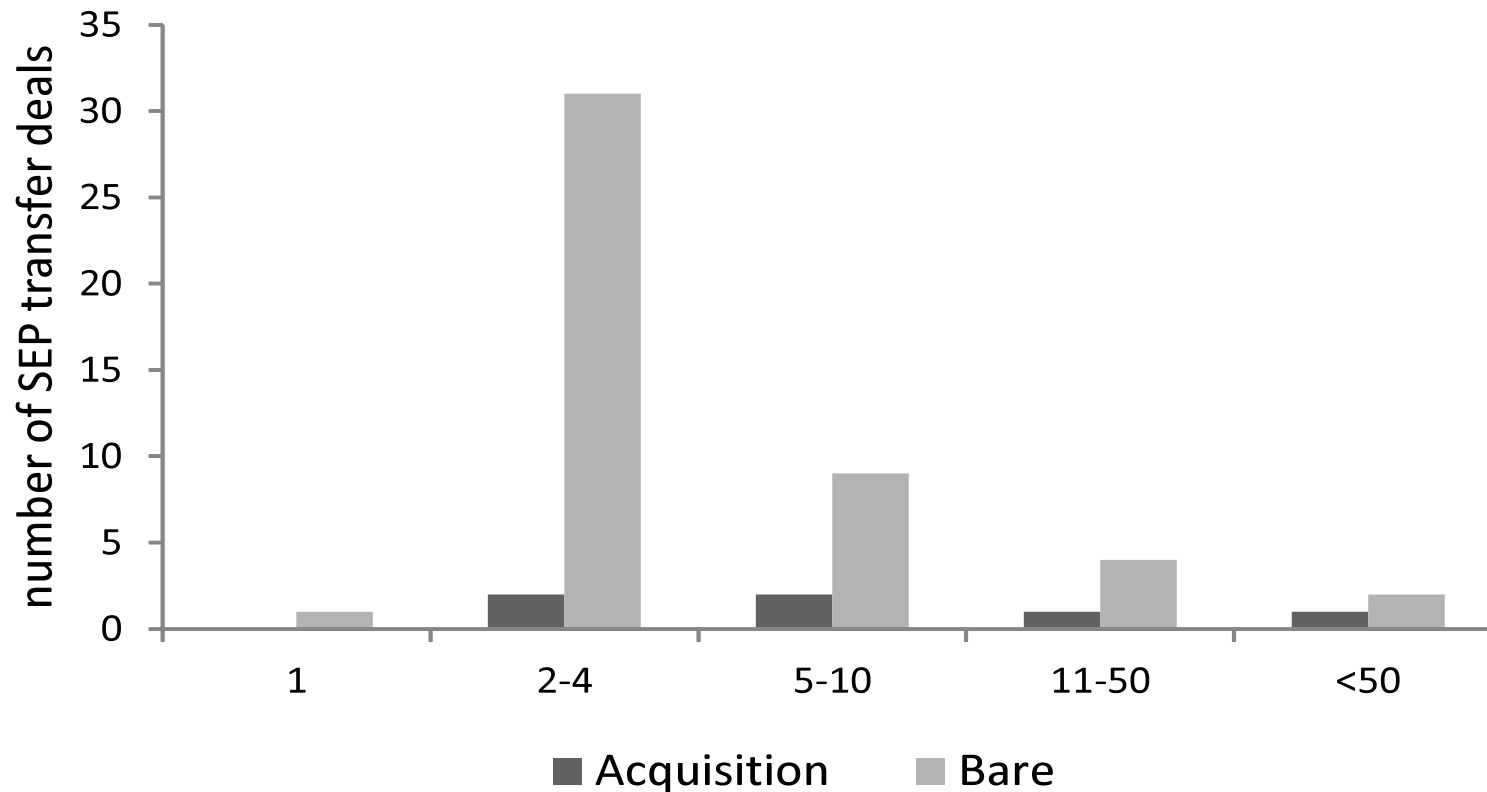
A real take-off after 2004.

The case of standard essential patents (ETSI, ISO, ITUT, IEEE, JTC1)



Also suggests a take off in the last 4 years.

Distribution of transaction size (1997-2009)



About 50 transactions over the period
Both small and large bundles
The two largest transactions took place in 2009

The case of ETSI declarations (1997-2011)

Year	Decl. pat. / year	Applicant	New assignee	Families	Declared patents
1997	6	INDIVIDUAL	FRANCE TELECOM	1	6
2001	9	UNIVERSITY	FRANCE TELECOM	1	9
2002	2	UNIVERSITY	SAMSUNG	1	2
2006	1	MOTOROLA	POEM TECHN.	1	1
2007	1	OKI	CANON	1	1
2008	2	ATT IPM	BLACKBERRY	1	2
2009	114	MOTOROLA	POEM TECHN.	1	1
		NOKIA	SPYDER NAVIGATIONS	1	2
		NOKIA	QUALCOMM	35	96
		IPWIRELESS	NORTHROP GRUMMAN	1	2
		SWISSCOM MOBILE	RAIDAX TECHNOLOGY	1	1
		NOKIA	EASTMAN KODAK	4	12
2010	13	ALCATEL LUCENT	QUALCOMM	1	2
		NORTEL NETWORKS	APPLE	1	8
		IPWIRELESS	WIRELESS TECH SOLUTIONS	2	3
2011	134	MOTOROLA	BLACKBERRY	1	10
		NOKIA	MOSAID	40	118
		NOKIA	MOTOROLA	1	3
		ALCATEL LUCENT	INTELLECTUAL VENTURES	1	3

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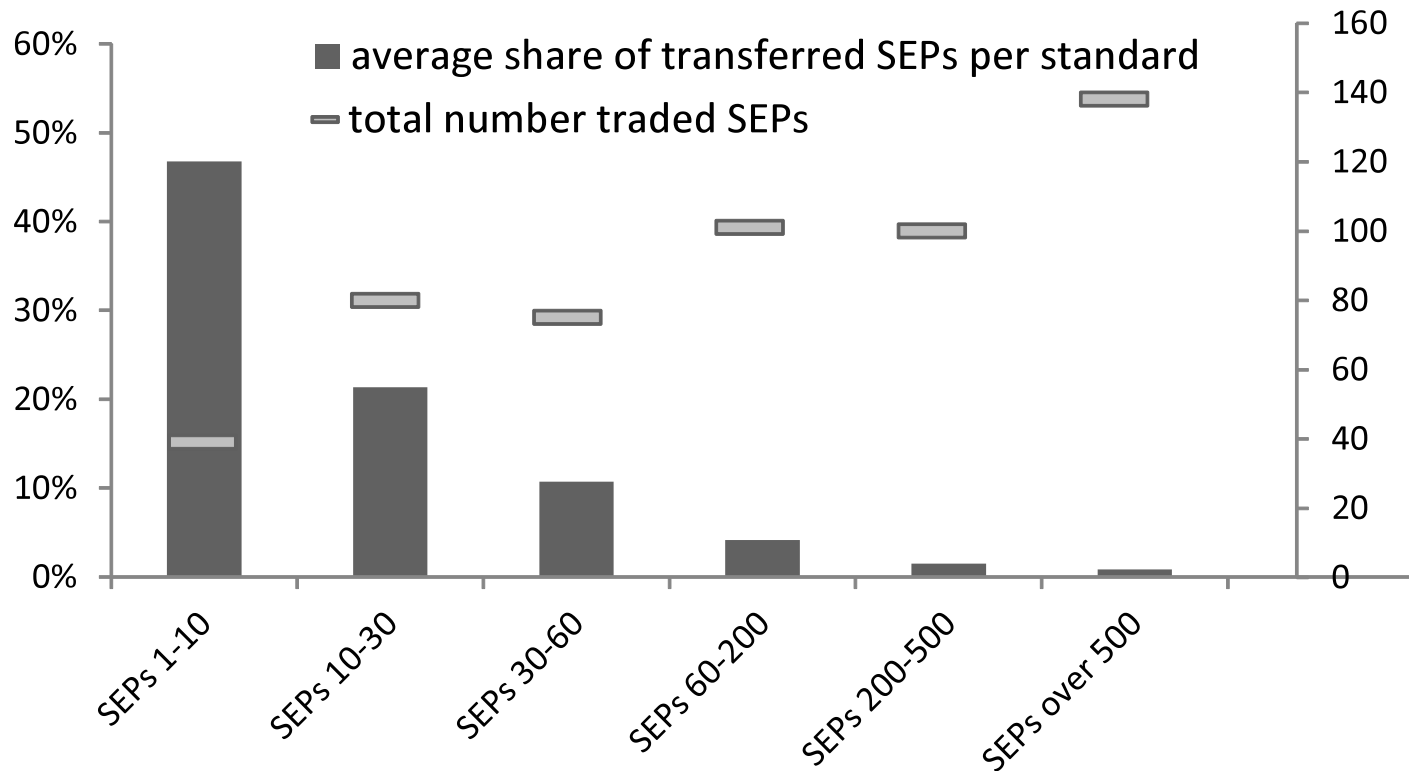
IMPACT ON STANDARDS

SEP transfers by SSOs (1997-2009)

SSO	Transferred patents	Share of all declared SEPs	Standards s.t. SEP transfers	Share of all standards
ETSI	261	3%	78	16%
JTC1	48	7%	7	12%
IEEE	17	1%	4	5%
ITU-T	13	2%	9	4%
ISO	2	2%	1	3%

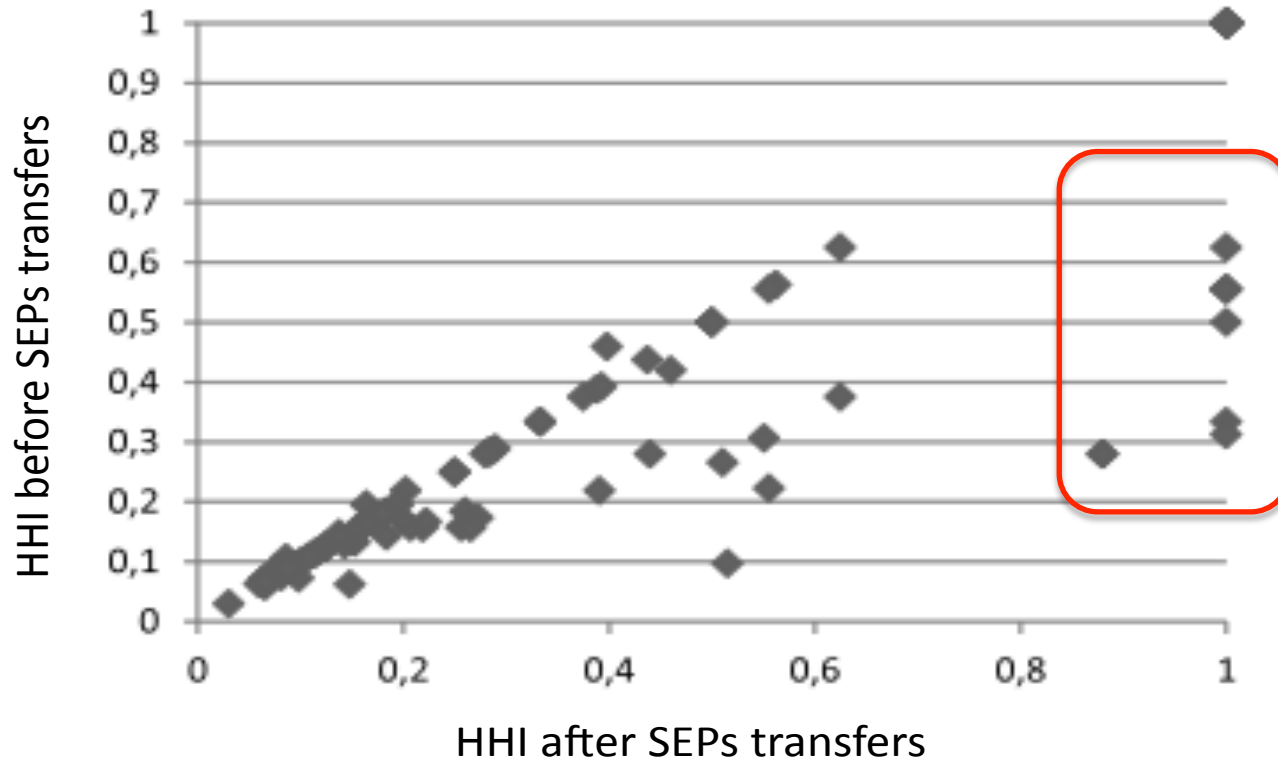
Transfers concern a small fraction of all declared SEPs,
Yet more than 10% of standards at ETSI and JTC1.

Impact of SEP distribution



A minor effect on SEP fragmentation for “large” standards
Real impact only on standards with less than 60 declared SEPs

Impact on SEP fragmentation at the standard level

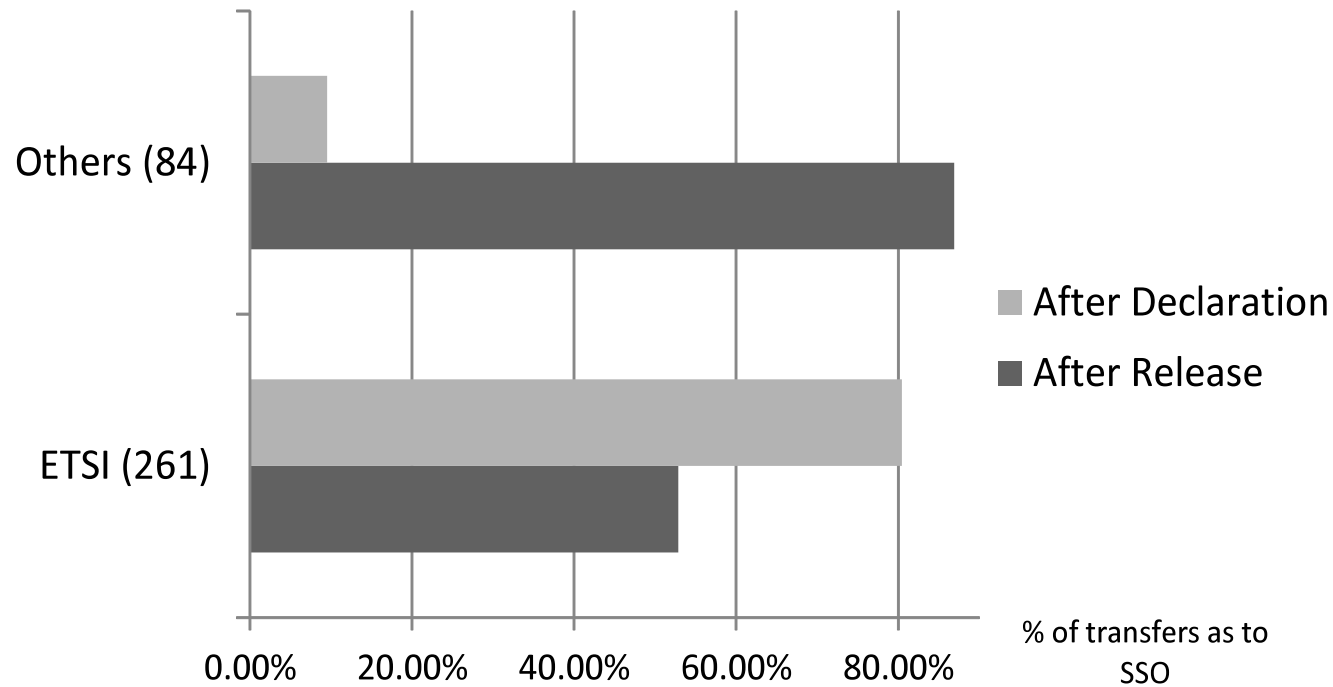


Most (80%) transfers increase concentration.

Perfect pooling for some small standards (Qualcomm/Nokia)

ROLE OF DECLARATIONS

Timing of SEP transfers (1997-2009)



Most transfers take place after standard release.
Declarations take place before transfer at ETSI only.

Who buys before/after declaration? (1997-2009)

- “Insiders”: 102 firms that declared other SEPs on the same standard
- “Outsiders”: 15 firms that declared no other SEPs

Likelihood that declaration follows sale (Probit)

335 obs.	Coefficient	Standard Error
Insider	.93181***	.3553431
ETSI	-1.816759***	.1865517
Cons.	.0390708	.3533412

“Outsiders” mostly target declared patents.
“Insiders” also buy undeclared patents.

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	IPWIRELESS	NORTHROP GRUMMAN	1
	SWISSCOM MOBILE	RAIDAX TECHNOLOGY	1
	NOKIA	EASTMAN KODAK	4
2010	ALCATEL LUCENT	QUALCOMM	1
	NORTEL NETWORKS	APPLE	1
	IPWIRELESS	WIRELESS TECH SOLUTIONS	2
2011	MOTOROLA	BLACKBERRY	1
	NOKIA	MOSAID	40
	NOKIA	MOTOROLA	1
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Conclusion

- A take off SEPs trade in Europe in the late 2000s
 - More transactions, some of which very large
- Different trade patterns seem to coexist
 - Patent pooling (for small standards) + landscape cleaning
 - Acquisitions by outsiders (later entrants, NPEs)
- Information matters
 - Standard release is a prerequisite
 - Declarations facilitate access to SEPs for outsiders
- Work in progress

Thank you