

Economic insights on patent pools

Yann Ménière

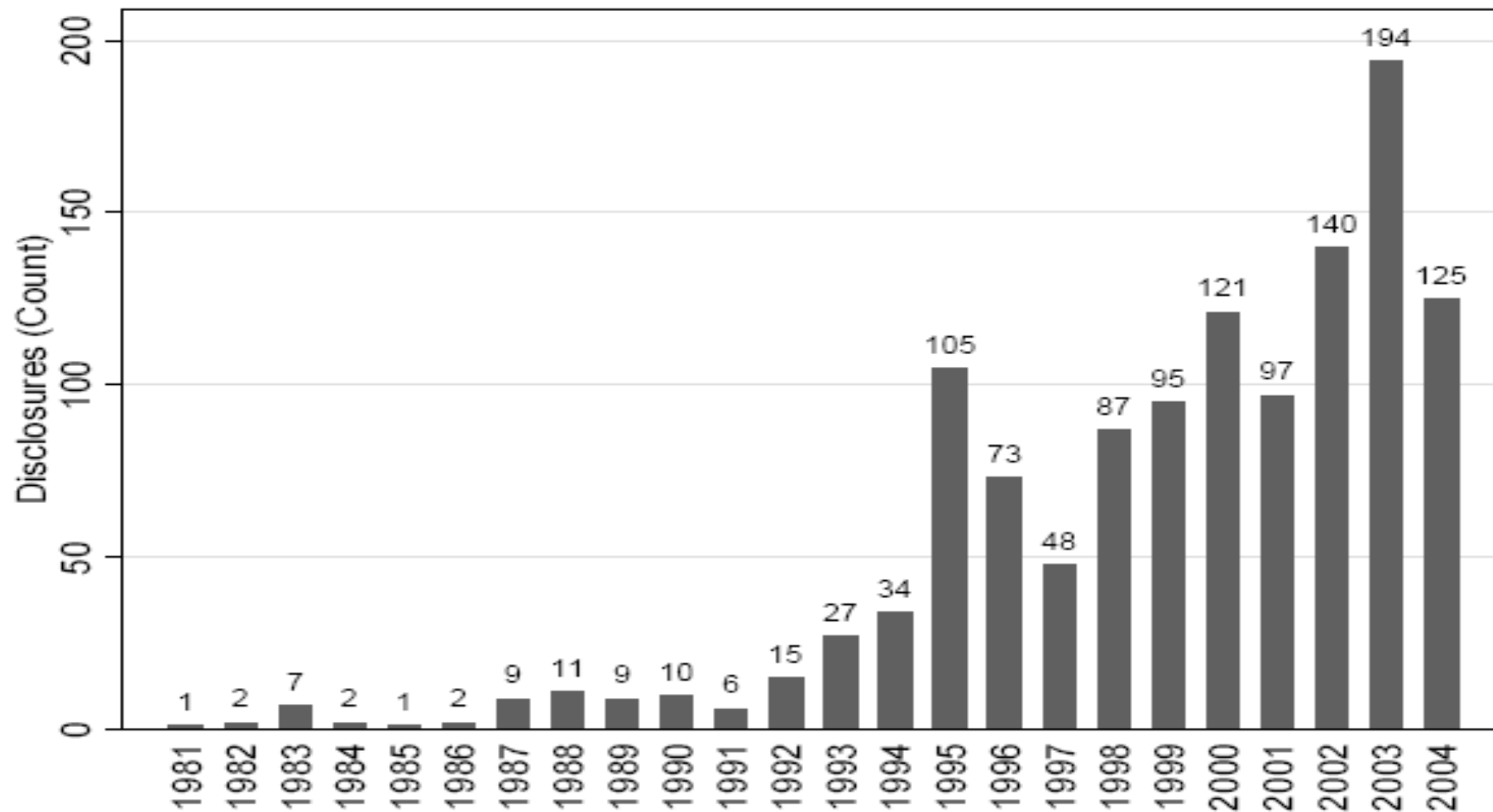
Cerna, MINES ParisTech

Outline

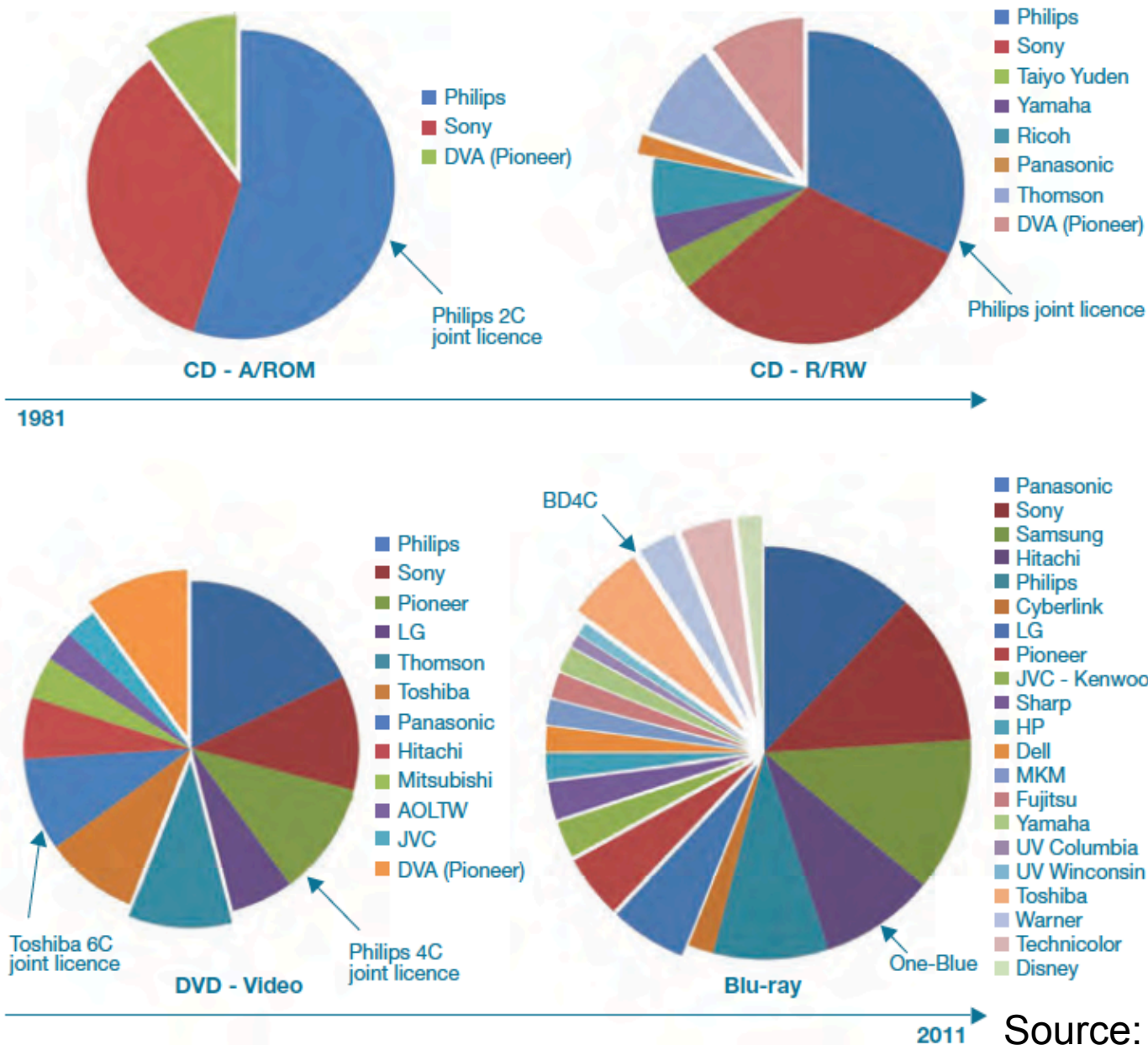
- Background: the IT “patent thicket”
- Why pooling patents
- Anticompetitive effects
- Some limitations

Patents claimed on IT standards

Disclosures at ANSI, ATIS, ETSI, IEEE, IETF, ITU, OMA, TIA
(source: Simcoe, 2005)



Growing number of licensors

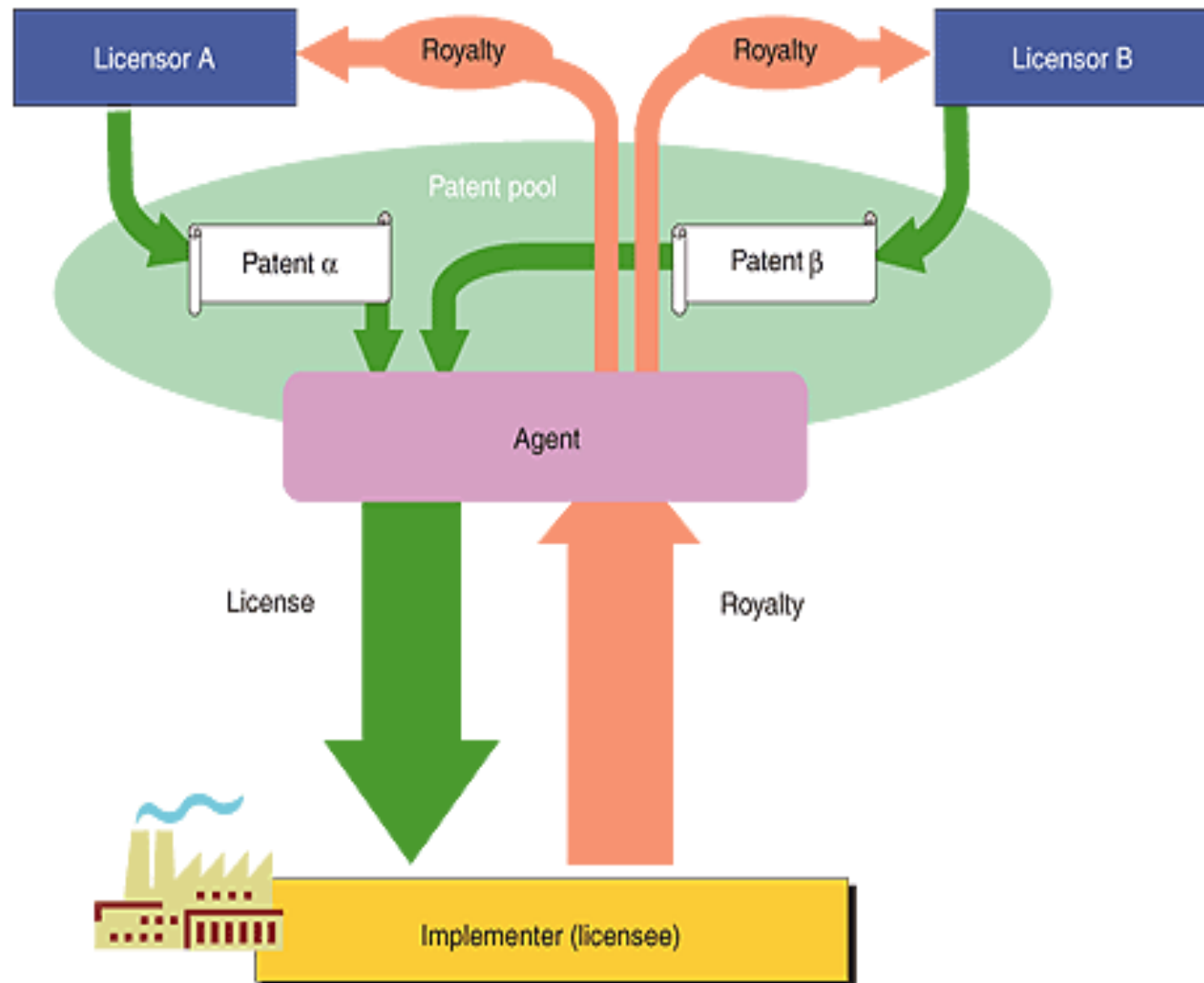


Source: Peters (2011)

IP fragmentation hampers technology diffusion

- High transaction costs
 - Identification, negotiation, enforcement
 - Legal uncertainty
- “Double marginalization” (Shapiro, 2001)
 - Each licensor tends to charge high royalties
 - Royalty stacking then excessively stifles demand

Patent pools: Definition



Why pooling patents?

1. Lower transaction costs
 - One stop shopping
2. Lower royalties, but higher income...
 - A single (monopoly) royalty for the package of patents
 - Lower royalties are more than compensated by wider diffusion
3. Level playing field for licensees
 - Same patents, same terms

Pools can be anticompetitive

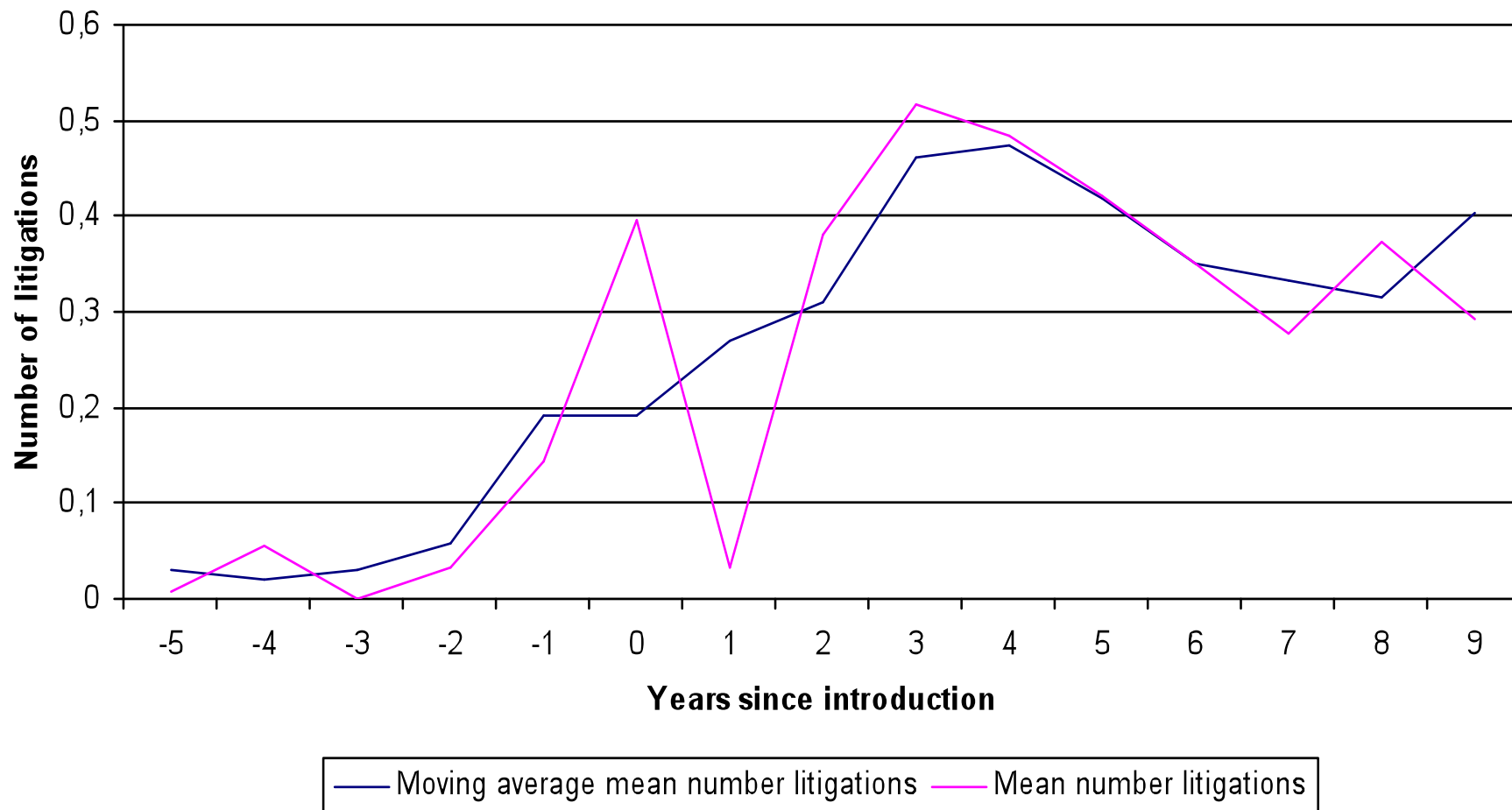
- First pools in history were cartels
 - Late 19th-early 20th: Sewing machines, Aircraft, chemicals
 - Pooling of rival technologies (Lerner et al., 2007)
 - Adverse effect on innovation (Lampe & Moser, 2010)
 - ⇒ Antitrust authorities have long been hostile
- A new generation of pools in the late 1990s,
 - Due to ICT standards (MPEG, DVD)
 - New US and EU guidelines

Screening essential patents

- Only “essential” patents are allowed in a pool
 - Assessment by independent experts
- Essential patents are... complements
 - no cartels between substitutes (Summit-VISX)
 - Independent licensing is an effective screening mechanism (Lerner & Tirole, 2004)
- ... necessary to implement the standard
 - Otherwise, risk of horse-trading and foreclosure
- ... legally valid

Impact on patent enforcement

- More litigation, easier settlements (Delcamp, 2011)



Impact on patent enforcement

- More litigation, easier settlements (Delcamp, 2011)
- A positive effect of independent assessment
- The more the stronger
 - However, free riding
 - One-Blue (Blu-ray): licensors commit to cooperate

Some limitations

- The best way to benefit from an IP pool may be to stay out!
 - BOBW: strong demand + high royalties!
 - 3G, Thomson/DVD9C
- Royalty-sharing rule
 - Usually: proportionality rule
 - Simple, but unfair and fuels patent inflation
 - Recent improvements
 - Proportional to patent families
 - Difference between physical and application formats