

Economics of Innovation and Intellectual Property

Course title – Intitulé du cours	Economics of Innovation and Intellectual Property
Level / Semester – Niveau /semestre	M2/S1
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Doh-Shin Jeon
Other teacher(s) – Autre(s) enseignant(s)	
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Other teacher(s) – Autre(s) enseignant(s)	
Lecture Hours – Volume Horaire CM	30
TA Hours – Volume horaire TD	
TP Hours – Volume horaire TP	
Course Language – Langue du cours	English
TA and/or TP Language – Langue des TD et/ou TP	

Teaching staff contacts – Coordonnées de l'équipe pédagogique :

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T675 (office)

Course Objectives – Objectifs du cours :

We introduce the students to a selection of important current issues in the economics of intellectual property (IP). After the introduction to the messy current situation of the IP world and firms' IP strategies, we review important economic contribution to topics such as licensing, litigation and injunction, settlement, weak patents, patent pool, patent trolls (or NPEs), cross-licensing, standard setting organizations etc. Big data and AI have created a new platform economy and have been transforming traditional sectors. We will try to understand innovation in platform ecosystems and platformization of new and old sectors.

Prerequisites – Pré requis :

Students need to have basic knowledge of industrial organization theory; the TSE M1 IO level is fine. This implies that you also need to know basic game theory.

Practical information about the sessions – Modalités pratiques de gestion du cours :

Laptop and Tablet: You should not use them but for tying.

Grading system – Modalités d'évaluation :

Grading will be based on the final exam (70%) and group presentations and participation in the class (30%).

Bibliography/references – Bibliographie/références :

- Suzanne Scotchmer, *Innovation and Incentives*, 2004, MIT Press
- Bessen, J., and Meurer, M., 2008. *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*. Princeton, NJ: Princeton University Press.
- Jaffe, A. B. and J. Lerner, 2004, *Innovation and Its Discontents: How Our Broken Patent System is Endangering Innovation and Progress, and What to Do About It.*, Princeton, N.J.: Princeton University Press.

Session planning – Planification des séances :

Session 1: Introduction

The major part is based on the slides made by Margaret Kyle on “IP Business Strategy”, which will be complemented by the following papers.

- Andrei Hagiu (2011) “Intellectual Property Intermediaries”, Harvard Business School, Case study
- Andrei Hagiu, David Yoffie and Alison Berkley Wagonfeld (2011) “Intellectual Ventures” Harvard Business School, Case study
- Michael A. Heller and Rebecca S. Eisenberg (1998) “Can Patents Deter Innovation? The Anticommons in Biomedical Research” *Science* 280: 698-701

Session 2: Antitrust limits to settlement

- Carl Shapiro (2003) "Antitrust Limits to Patent Settlements" *The RAND Journal of Economics* Vol. 34, No. 2, pp. 391-411

Session 3: Injunction and weak patents

- Carl Shapiro. (2010). “Injunctions, Hold-Up, and Patent Royalties.” *American Law and Economics Review*. 12:509-557
- Farrell and Shapiro, (2008). “How strong are weak patents?”, *American Economic Review*, 98:1347-69

Session 4: Patent Pool

- Lerner, J., and J. Tirole. 2004. "Efficient Patent Pools." *American Economic Review*, 94(3): 691-711.
- Choi, Jay Pil and Heiko Gerlach (2015). “Patent Pools, Litigation and Innovation.” *The RAND Journal of Economics*, 46(3): 499-523

- Markus Reisinger and Emanuele Tarantino (2016), "Patent Pools in Input markets" Mimeo

Session 5: NPE (Patent Trolls)

- Lemus, Jorge and Temnyalov, Emil, (2017) "Patent Privateering, Litigation and R&D Incentives," The RAND Journal of Economics 48(4)
- Choi, Jay Pil and Heiko Gerlach (2018). "A Model of Patent Trolls." International Economic Review, 59(4)

Session 6: Cross-licensing

- Jeon, Doh-Shin and Yassine Lefouili (2018) "Cross-Licensing and competition", The RAND Journal of Economics, 49(3): 656-671

Session 7: Platform M&A and innovations

- Gilbert, R. J., & Newbery, D. M. (1982). "Preemptive patenting and the persistence of monopoly", The American Economic Review, 514-526.
- Kevin Bryan and Erik Hovenkamp (2020) "Antitrust Limits on Startup Acquisitions", Review of Industrial Organization, 56, pp, 615- 636

Session 8: Other topics (some topics may be left for students' presentation)

i) Patent exhaustion

- Olena Ivus, Edwin Lai and Ted Sichelman (2020) "An Economic model of Patent Exhaustion", Journal of Economics and Management Strategy, 29 (4), pp. 816-833

ii) Component licensing vs End-product licensing

- Group of Experts on Licensing and Valuation of Standard Essential Patents, (2021), "Contribution to the Debate on SEPs", the European Commission (see Part 3.2 licensing in the value chain)

iii) Two-sided platforms and biases in technology adoption

- Jay-Pil Choi and Doh-Shin Jeon, (2022), "Platform design biases in ad-funded two-sided markets" forthcoming, RAND Journal of Economics

iv) Platform Liability and Innovation

- Doh-Shin Jeon, Yassine Lefouili and Leonardo Madio, (2022), "Platform Liability and Innovation

v) Ad valorem commission and innovation

- Llobet, Gerard and Jorge Padilla, (2016). "The Optimal Scope of the Royalty Base in Patent Licensing," Journal of Law and Economics, 59 (1), pp. 45-73.
- Doh-Shin Jeon and Patrick Rey, (2022). "Platform Competition and App Development"

vi) Platformization

- Can Atik and Bertin Martens, (forthcoming), "Competition Problems and Governance of Non-Personal Agricultural Machine Data: Comparing Voluntary Initiatives in the US and the EU", Journal of Intellectual Property, Information Technology and E-commerce Law.

Session 9- 10: Student presentations

Distance learning – Enseignement à distance :

- Interactive virtual classrooms / Classe en ligne interactive
- MCQ tests and other online exercises and assignments