Understanding Patents in Photonics

CARLES PUENTE

June 08, 2026 to June 09, 2026
15:00 to 18:00
Elements Room

The aim of the course is getting ICFO researchers to understand the basics of the patent, to learn how to find, read and interpret patent documents and to get familiar with some basic patent writing techniques. Researchers will understand the value and role of patents in the technology ecosystem, will get familiar with the patent prosecution process and learn to manage patent information comfortably.

Target group: PhD students, Postdoctoral researchers, and Research Engineers.
Available places: 25
Workshop Content

Developing your scientific c idea
Charting the grant landscape
Analyzing the call
Organising and connecting your ideas
Dealing with key sections for success
Reverse planning for preparing and submitting

A first session will be used to overview through several examples the basics of the patent system, its motivation and social impact and its use in several technology corporations in the telecom, electronics and photonics fields. The fundamental nature of a patent right will be introduced, explaining the impact of such a nature in business dynamics. The general principles of patentability will be explained, and the architecture of a patent document will be introduced, so participants get familiar with managing patent information. The aim of the next session of the course is to provide the participants with some basic practical knowledge concerning fundamental patent-related issues, such as patent writing, scope of protection, and patent prosecution. The goal is to enable researchers to become effective and proactive when participating in the process of patenting as a results of their R&D. This session will include a practical case: a real patent in the photonics field will be handed out to the researchers who will practice in writing some claims. Participants will be able to share their proposals, which will be discussed as a group.
Trainer: Dr. Carles Puente
Carles is a co-founder and director at Fractus S.A., where he has overseen technology and

intellectual property portfolio development since 1999. As a CTO and IPR director, he developed an antenna technology and patent portfolio which has been massively adopted by the cell phone industry and licensed to 10 of the top cell phone OEMs worldwide. Carles is a university professor at Barcelona Tech (UPC), where he is currently teaching graduate courses on technology and patent asset management. In 2013 he has been teaching patent management at the Executive master's in technology management of the University of Pennsylvania, a program sponsored by the Wharton business school. He has been an invited speaker in several industry/entrepreneurship forums including the Licensing Executive Society meeting in Barcelona (2012), the FINAVES meeting at IESE Business School (2012), the Mobile World Congress (2007), the REE by Stanford University (2007), the European Venture Capital Association (2001) and the International Congress of the Forum for ICT Professionals (2001). As a researcher and scientist, Carles and his team have been nominated to the European Inventor Award by the European Patent Office (2014), and awarded with the Technology Pioneer award by the World Economic Forum (2005), the European Information Technology Grand Prize by the European Commission (1998), the Premi Ciutat de Barcelona (1999) and Best Doctoral Thesis in Mobile Communications in Spain (1997). He is an inventor in 145 granted patents (including 83 US patents) within a set of 400 patent and patent applications worldwide and has co-authored over 150 scientific papers in scientific journals and conference proceedings. He was an invited speaker at the Antennas and Propagation Millennium Conference in Davos (2000), the Gordon Research Conference on Fractals (1998) and the Fractals in Engineering conference (1997). He holds a Ph.D. in Telecommunications Engineering from Barcelona Tech (UPC,1997), a M.Sc. from the University of Illinois at UrbanaChampaign (1994), and a Telecom Engineer degree from Barcelona Tech (1992).
Hosted by: Academic Affairs