

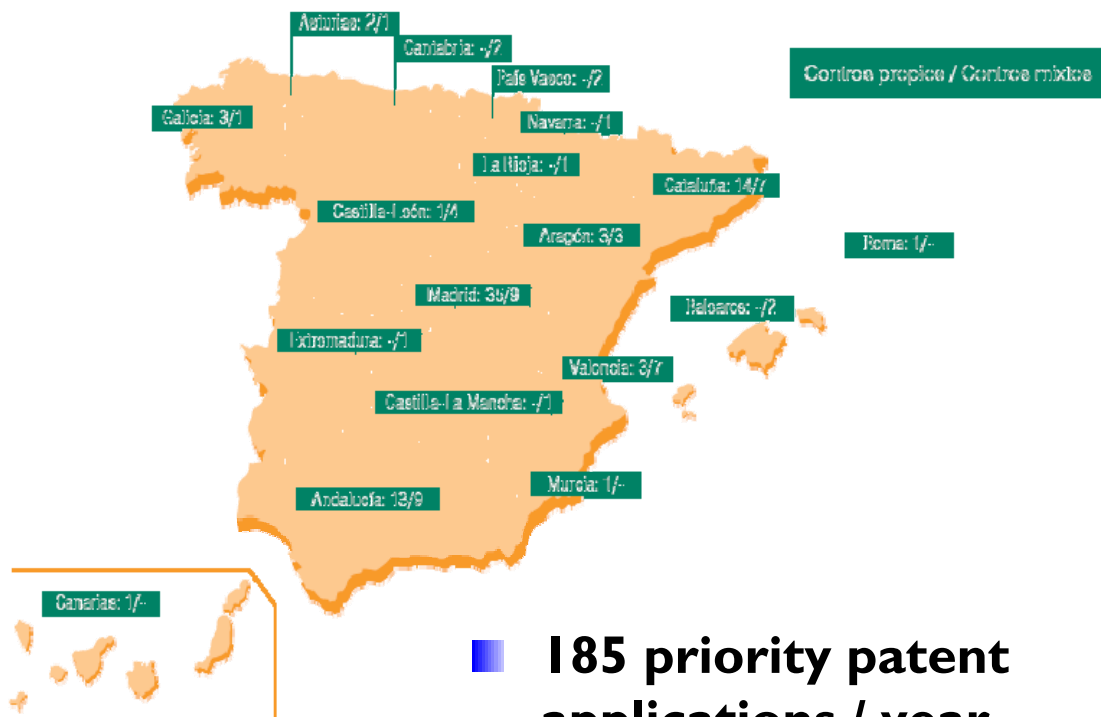
# **Negotiating Royalties - Commercializing Intellectual Property Assets**

## **Approaches by the Consejo Superior de Investigaciones Científicas (Spanish National Research Council)**

**Dr. José Pablo ZAMORANO**  
Licensing Coordinator (Life Sciences Area)  
Deputy Vice-Presidency for Knowledge Transfer of CSIC  
[jpzamorano@orgc.csic.es](mailto:jpzamorano@orgc.csic.es)

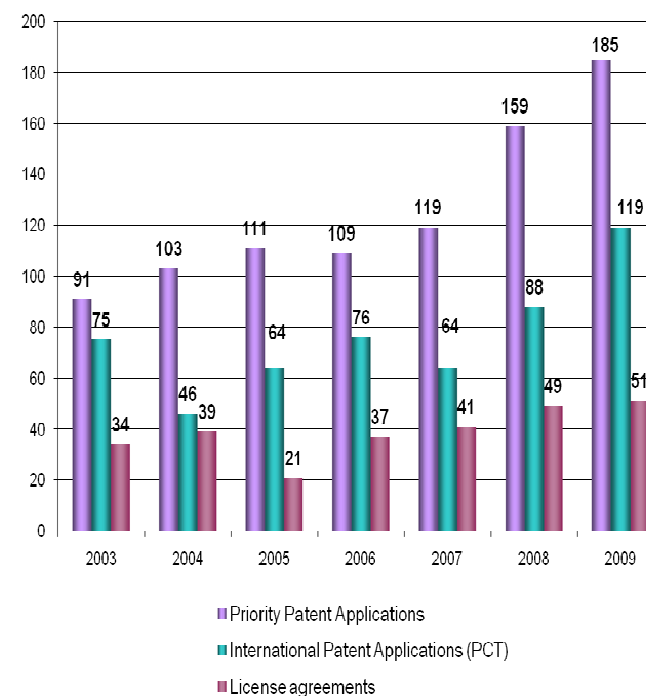
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# CSIC: SOME FIGURES



- All knowledge areas
- 135 research centers
- Nationwide location
- 12000 + employees
- 6000 researchers

- 185 priority patent applications / year
- Approx. 100 PCT application / year
- 50 patent licenses / year



# OUR APPROACH TO IP COMMERCIALIZATION



- ➡ IP is an **added value** for commercializing knowledge
  - ➡ IP allows and helps **dissemination** of knowledge
  - ➡ IP titles, particularly patents, can be used as **promotional tools**
  - ➡ The market for IP and its **rules are still being developed** (many stakeholders are still learning !)
  - ➡ IP commercialization is **compatible** with the more traditional R+D goals
  - ➡ IP commercialization from **CSIC** must meet **fair competition** principles at the international level
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# ALLOCATION OF IP OWNERSHIP IN R&D CONTRACTS



- **Technological services** (*established methods; well-defined parameters and objects*)
    - IP on results belong to the company
    - A market price shall be paid
  
  - **Publicly funded research**
    - IP on results by CSIC belong to CSIC (according to the Spanish laws)
  
  - **Privately funded research**
    - If a market price is paid, IP on results belong to the funding company / entity
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# MARKET PRICE FOR IP

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## Market Price = costs + benefit

- Costs are estimated by our researchers
- Benefit to be established by us:
  - In a case by case basis
  - Taking into account previous and future relationship with the company
  - Allocation of IP ownership is a main factor
- Including licensing conditions in R&D contracts allows delaying payment of the benefits until the value of IP is realized in the market



# MARKET PRICE FOR IP

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**Why allocation of IP ownership is a main factor to estimate the market price for R&D Contracts?**

**If CSIC keeps part / full IP ownership:**

- **Helps initial protection of IPR**
  - **Ensures that commercialization efforts are done (we do not allow blocking approaches)**
  - **Higher chances of exploitation of IPR in other fields**
  - **Better risk-sharing between CSIC and companies**
  - **Helps recognising CSIC's contribution in the long term (i.e. when there is a commercial product)**
  - **Allows distributing the income between the inventors, their research centres and groups, and CSIC**
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# IPR LICENSING STRATEGIES

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- Licensees can be from anywhere (after all, what does “a Spanish company” mean nowadays?)
  - Worldwide exclusive licenses for a given application are preferred
  - Licensees must develop / market the knowledge and defend and prosecute CSIC’s IP rights
  - Sub-licensing only if approved by CSIC
  - Royalty rates on net sales are used in most licenses (others: up-front payment, milestones payments, fixed annual amounts, percentage of fixed payments by third parties)
  - Our pricing method: In-house royalty data + comparable industry royalties
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# IPR LICENSING – CURRENT ISSUES

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- Some **basic “rules” still under discussion** (e.g. maintenance of patents, restrictions to dissemination, rights on improvements, no warranties)
  - Many **intermediaries** appearing
  - Permission and royalties for **sublicenses** (based on the sales of the product or on the income for the sublicensor?)
  - **Stacking royalties**
  - **Spin-off** approach still underdeveloped
  - Role of **IP licence technicians** still unclear in most PROs / universities / research centres
  - IP commercialization too much in fashion?
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## 1. Determination of gluten in foods

- Research on celiac disease (intolerance to gluten - a mixture of proteins found in many cereals) being conducted at our CNB
- A strongly specific and sensitive antibody to gluten (R5) was generated
- Methods using the R5 antibody were patented (owned by CSIC)
- Different R5-based kits are sold under patent and know-how licenses from CSIC



- The ELISA R5 was adopted as the official method for determination of gluten in foods by the Codex Alimentarius
  - The standards of the Codex Alimentarius (a FAO / WHO joint organisation) are the guidelines used by many countries in international trade / national legislation
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# SUCCESSFUL IP COMMERCIALIZATION

## 2. Elver-like products (“gulas”)

- Elver fishing began to decline drastically in Spain in the 80’s
- Up to a 90% reduction in fishing was suffered by Angulas Aguinaga
- The company contacted us to look for natural substitutes
- In 1991 it replaced natural elvers (“angulas”) with “gulas” made from surimi, using methods developed at CSIC
- Patent owner = Angulas Aguinagas
- CSIC got an upfront payment
- ➔ AA has a current 90 M € turnover, two large industrial facilities and 250+ employees
- ➔ Personnel trained at CSIC is leading its R&D department



# SUCCESSFUL IP COMMERCIALIZATION

## 3. DNA amplification

- A highly efficient enzyme for DNA replication (a DNA polymerase) was identified in a virus infecting bacteria by our researchers
- In 1989, United States Biologicals approached CSIC to file and license a patent on a method using this enzyme for amplification of minute amounts of DNA
- USB prosecuted the patent from the beginning, but CSIC held full IP ownership
- 75000+ kits based on this method have been sold since 2002 under a patent licence (~ 6,5 M € royalties in 8 years)
- These kits are used worldwide in research and forensics

