

# ***Experts' Meeting on Intellectual Property and Socio-Economic Development WIPO***

## ***Contribution to the Country Study of Brazil IP Use in Brazil***

**Geneva**

**December/2013**

# ***Contribution to the Country Study of Brazil***

- **Motivation to include Brazil in WIPO Country Study**

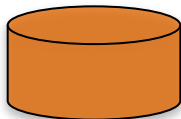
- ✓ Brazil is a middle income country and an emerging economy
- ✓ Brazil has a big consumer market (about 3,7%, according United Nations Statistics Division – 2009)
- ✓ Brazil is rich in natural resources (forests, biodiversity, etc)
- ✓ Brazil has a demand for new technologies (pre-salt)
- ✓ In Brazil SMEs represent more than 90% of total of companies and just 20% of GDP
- ✓ Brazil needs increase investments in Education and innovation in order to get integrate the global value chains
- ✓ Brazil has a consolidated IPRs System

## ***Contribution to the country study Brazil***

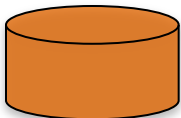
- The Brazilian IP Office (INPI) has, with the technical and financial support of WIPO/Economic and Statistical Division, prepared a **database designed to assist in statistical research into intellectual property information.**
- IP Coverage:
  - Patents
  - Trademarks
  - Industrial Designs
  - Software
  - Geographical Indications
  - Technological Contracts
- Time coverage: 2000-2012
- Collaborative Project between: INPI, WIPO and other Brazilian agencies
- Coordinated by INPI/AECON (~ Economic Advisory Area)

## INPI's Production Databases

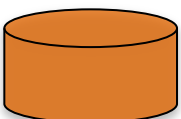
Patents



Trademarks



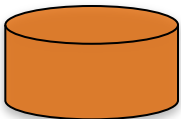
Industrial Designs



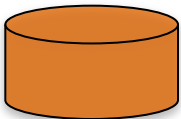
Software



Geographical Indications



Tech. Contracts

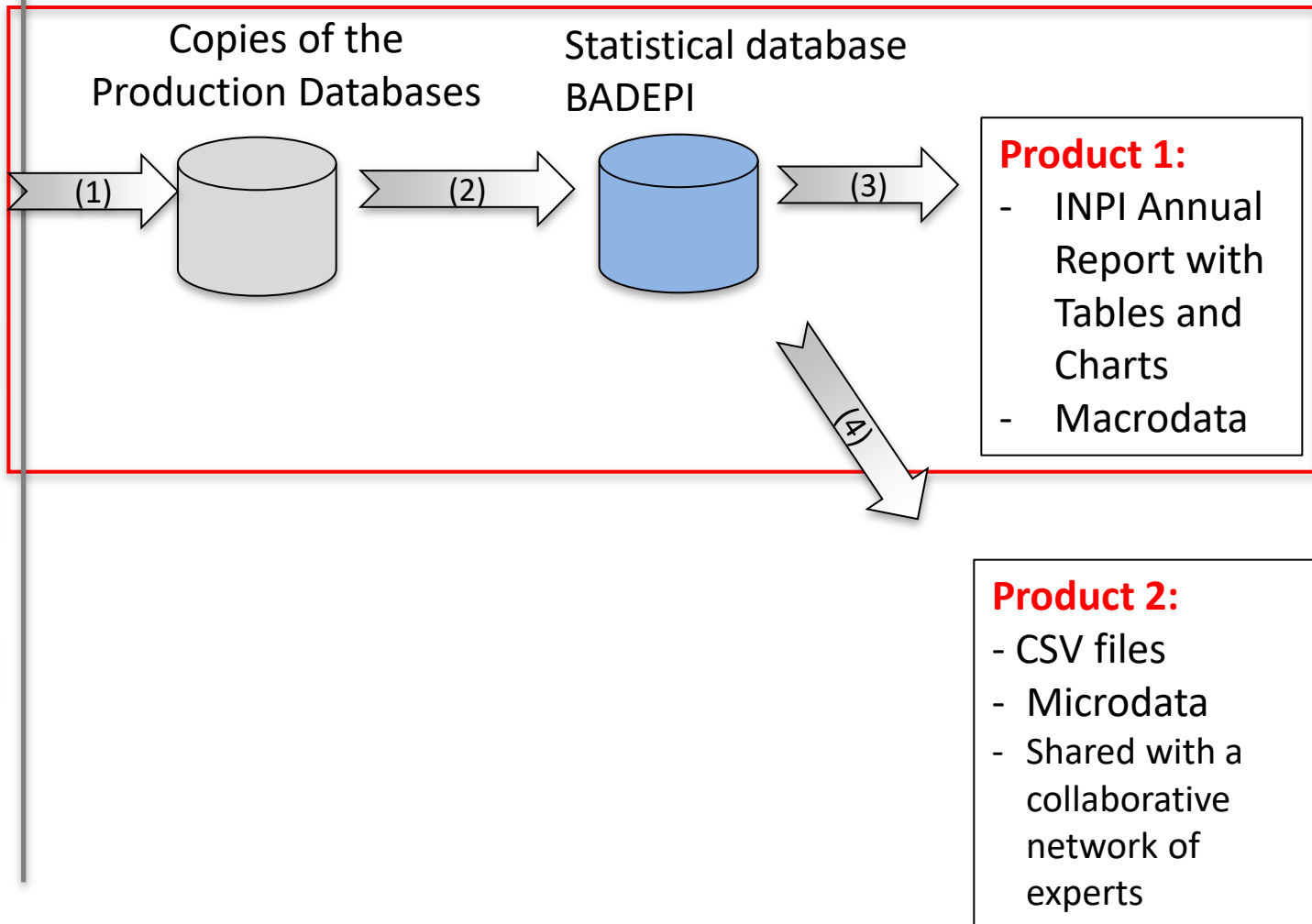


**Dynamic DBs!!!**

Insert new records

Correction of records

## INPI's Statistical Database



[Principal](#)[Marcas](#)[Patentes](#)[Desenho Industrial](#)[Contratos](#)[Indicação Geográfica](#)[Programa de  
Computador](#)[Documentação BADEPI](#)[Relatório de  
Inconsistência](#)

Clique na figura acima e acesse  
os dados anuais de depósitos  
para todos os serviços do  
Instituto.

[Marcas](#)[Patentes](#)[Indicação Geográfica](#)[Programa de Computadores](#)[Desenho Industrial](#)[Contratos](#)

## Trademark applications, 2000-2012

Ano	Depósitos	Registros
2000	108231	18412
2001	101617	20857
2002	94315	17682
2003	95580	10857
2004	94040	12492
2005	99320	18032
2006	95862	32803
2007	104219	128545
2008	121960	60305
2009	112841	64186
2010	127700	64537
2011	152737	60485
2012	151973	55230

## IP Use in Brazil – Patents

Patent (PI+MU) applications by type – 2000-2011

Year	Patents applications			Utility Models applications			PCT Route	
	Residents	Non-Residents	Total	Residents	Non-Residents	Total	Patents	Utility Models
2000	3,193	14,090	17,283	3,184	94	3,278	10,496	11
2001	3,446	14,403	17,849	3,439	95	3,534	11,153	5
2002	3,485	13,200	16,685	3,470	59	3,529	10,749	9
2003	3,867	12,544	16,411	3,578	55	3,633	10,378	8
2004	4,047	12,666	16,713	3,539	56	3,595	10,309	9
2005	4,066	14,432	18,498	3,173	57	3,230	12,017	7
2006	3,956	15,886	19,842	3,126	56	3,182	13,659	4
2007	4,200	17,463	21,663	3,001	37	3,038	15,270	2
2008	4,300	18,870	23,170	3,320	62	3,382	16,850	7
2009	4,277	18,129	22,406	3,337	41	3,378	16,171	12
2010	4,243	20,756	24,999	2,902	87	2,989	18,707	15
2011	4,733	23,916	28,649	2,956	124	3,080	21,307	30

In Brazil, share of applications of patent is quite higher than utility models

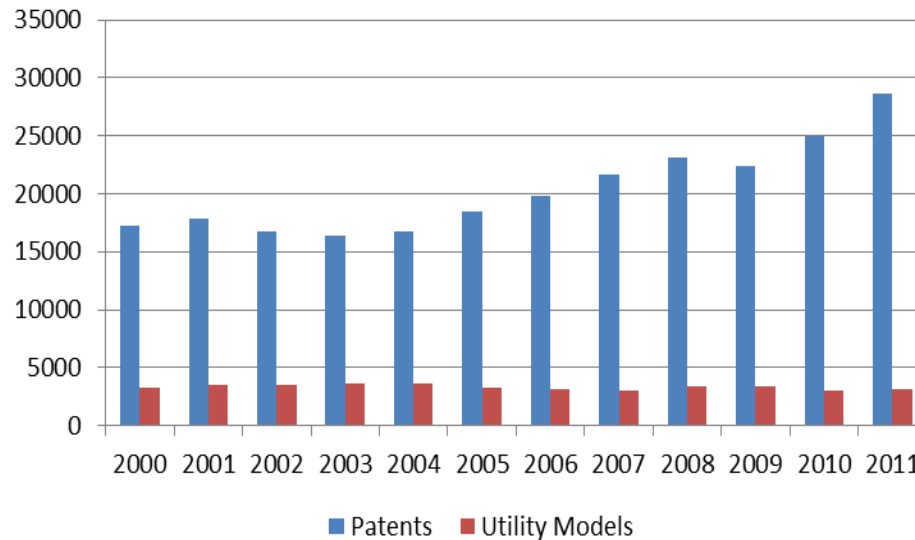
More than two thirds were filed through the PCT route.

Source: INPI's Statistical database (BADEPI)

- Patent filings in Brazil have grown in average about 5% per year from 2000 to 2011.
- In 2011, the Brazilian IP Office (INPI) received more than 28 thousand patent applications, which implies 66% more filings than in 2000.

## ***IP Use in Brazil – Patents***

**Patent (PI+MU) applications by type – 2000-2011**



Contrast  
trend!

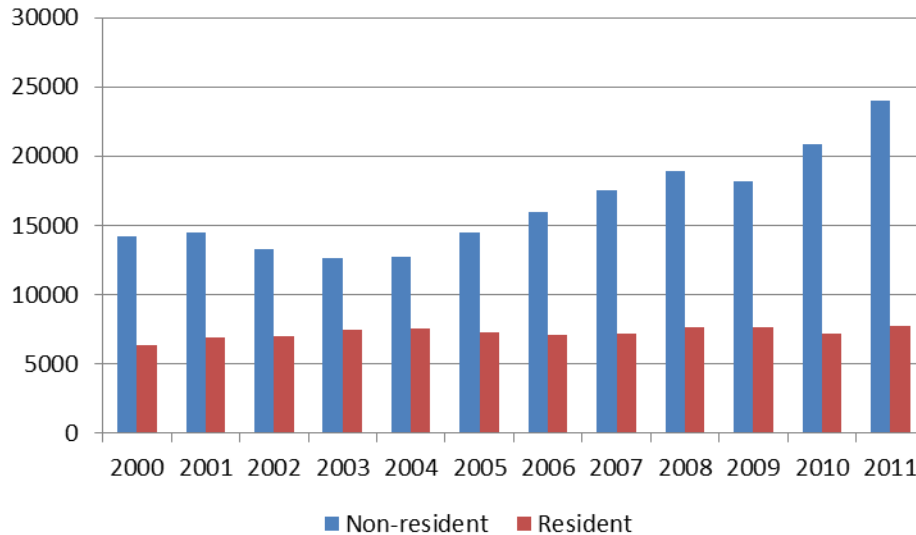
Source: INPI's Statistical database (BADEPI)

- Utility model applications have dropped an average of 0.6% per year since 2000.
- In 2011, the Brazilian IP Office (INPI) received more than 28 thousand patent applications, which implies 66% more filings than in 2000.



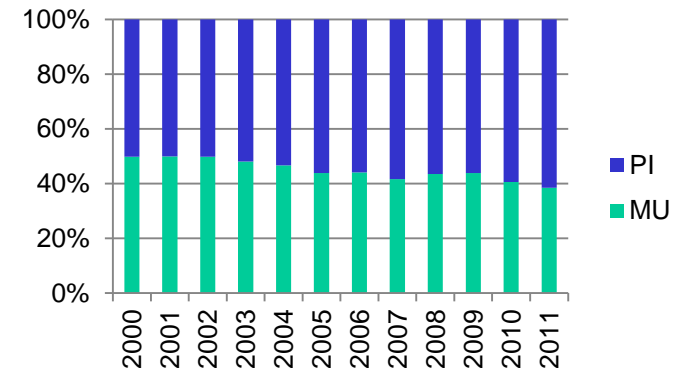
## ***IP Use in Brazil – Patents***

**Patent (PI+MU) applications by origin – 2000-2011**



Source: INPI's Statistical database (BADEPI)

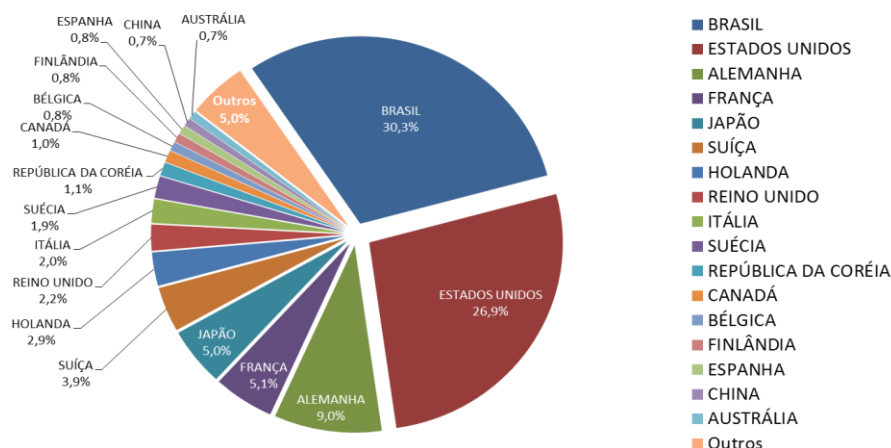
**Patent applications by residents – 2000-2011**



- Patent applications are mostly from non-residents.
- This feature is marked in PCT applications, which strongly influences the total applications of non-residents.

## ***IP Use in Brazil – Patents***

**Patent (PI+MU) applications by 1<sup>st</sup> applicant country – period 2000-2012**

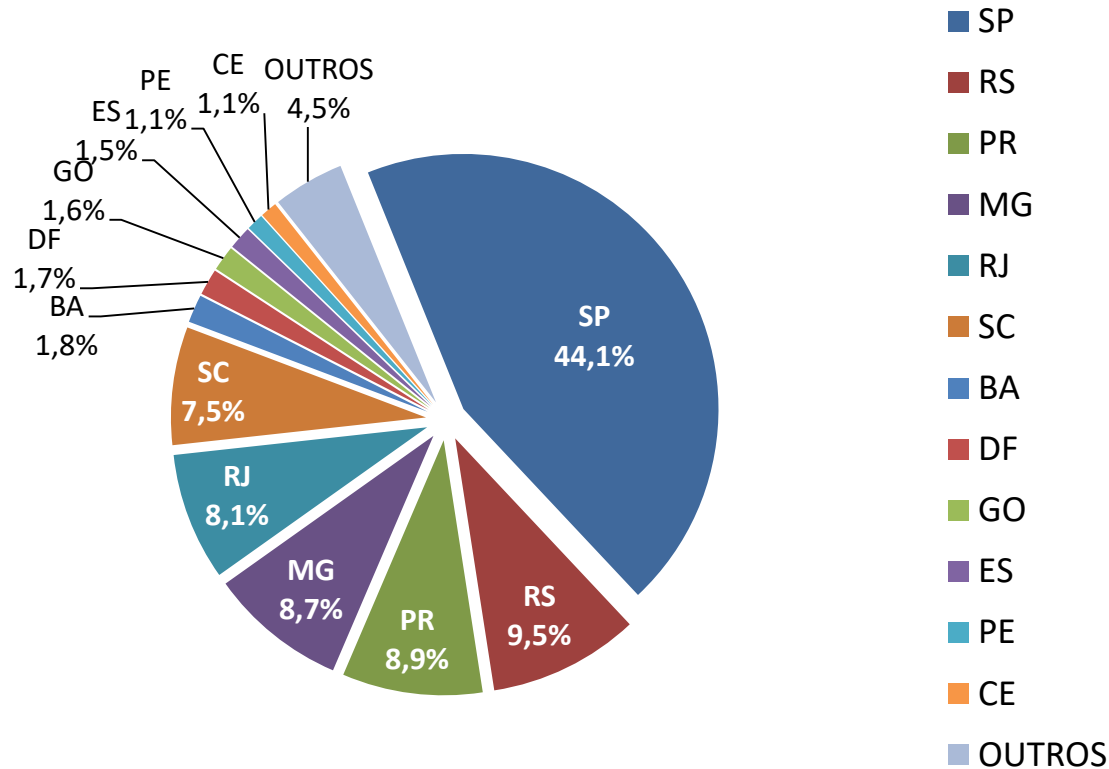


Source: INPI's Statistical database (BADEPI)

- The participation of Brazil (30.3%) outperforms the U.S (26.9%).
- This data highlights the significant participation of utility models in Brazilian case.
- 43.6% of the total patents filed in the period 2000-2012, taking as a Brazilians first applicants are of utility models.

## IP Use in Brazil – Patents

Patent (PI+MU) applications by States – period 2000-2012



Source: INPI's Statistical database (BADEPI)

- The distribution of patent applications by state is highly concentrated in São Paulo (more than 40% of the total).

## IP Use in Brazil – Patents

Brazilian applications by economic sector – 2006 and 2011

Divisão	Denominação	2006	2006	2011	2011
Total	Total	2.153	100,0%	2.964	100,0%
85	EDUCAÇÃO	219	10,2%	524	17,7%
28	FABRICAÇÃO DE MÁQUINAS E EQUIPAMENTOS	193	9,0%	233	7,9%
27	FABRICAÇÃO DE MÁQUINAS, APARELHOS E MATERIAIS ELÉTRICOS	104	4,8%	222	7,5%
84	ADMINISTRAÇÃO PÚBLICA, DEFESA E SEGURIDADE SOCIAL	49	2,3%	124	4,2%
20	FABRICAÇÃO DE PRODUTOS QUÍMICOS	96	4,5%	89	3,0%
72	PEQUISA E DESENVOLVIMENTO CIENTÍFICO	34	1,6%	82	2,8%
25	FABRICAÇÃO DE PRODUTOS DE METAL, EXCETO MÁQUINAS E EQUIPAMENTOS	101	4,7%	81	2,7%
46	COMÉRCIO POR ATACADO, EXCETO VEÍCULOS AUTOMOTORES E MOTOCICLETAS	72	3,3%	81	2,7%
22	FABRICAÇÃO DE PRODUTOS DE BORRACHA E DE MATERIAL PLÁSTICO	103	4,8%	79	2,7%
26	FABRICAÇÃO DE EQUIPAMENTOS DE INFORMÁTICA, PRODUTOS ELETRÔNICOS E ÓPTICOS	67	3,1%	74	2,5%

Manufacture of machinery and equipment is the second more important division in 2011

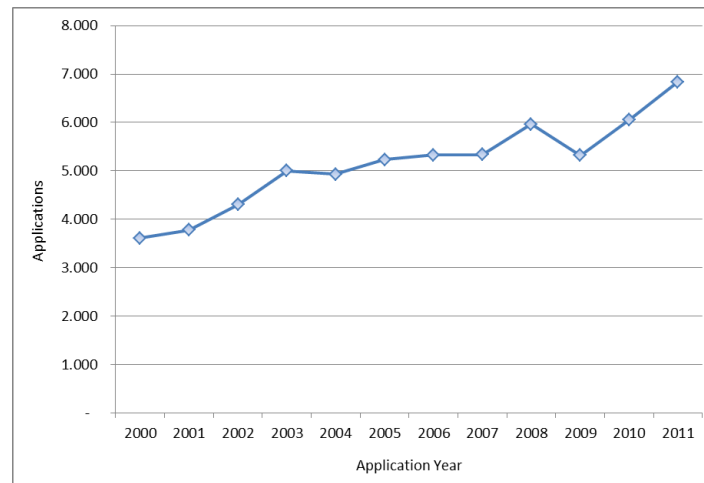
Manufacture of machinery, equipment and electrical materials increased its relative share from 4.8% to 7.5%

Source: INPI's Statistical database (BADEPI)

- Brazil has a strong participation of universities, especially the public universities in patent applications.
- Education, Public Administration, Defense and Social Security and Research and Development together represented 14% in 2006, reaching 25% in 2011.

## ***IP Use in Brazil – Industrial Designs***

**Industrial design applications filed in Brazil – 2000-2011**

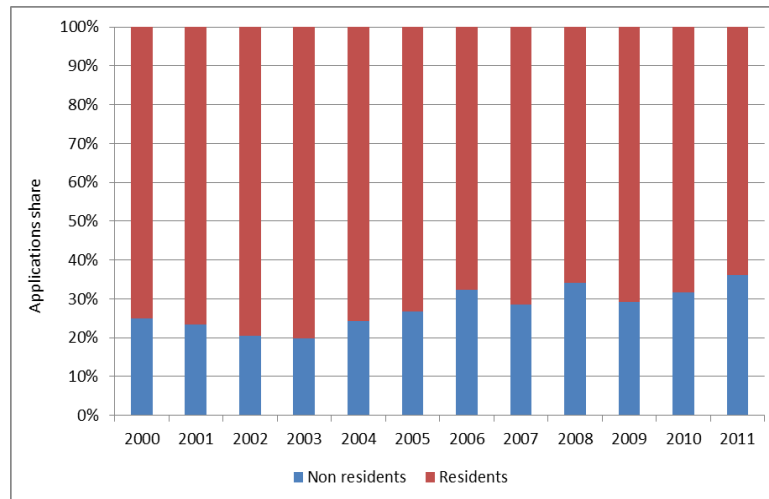


*Source: INPI's Statistical database (BADEPI)*

- The long-term trend shows a significant growth: the number of applications increased 89%, from 3,610 in to 6,835 in 2011.
- It is interesting to note that the growth was not continuous: +38.4% (2000-2003); +20% (2004-2007); -10.8% in 2009; +13.7% in 2010

## ***IP Use in Brazil – Industrial Designs***

**Industrial design applications filed in Brazil by origin – 2000-2011**

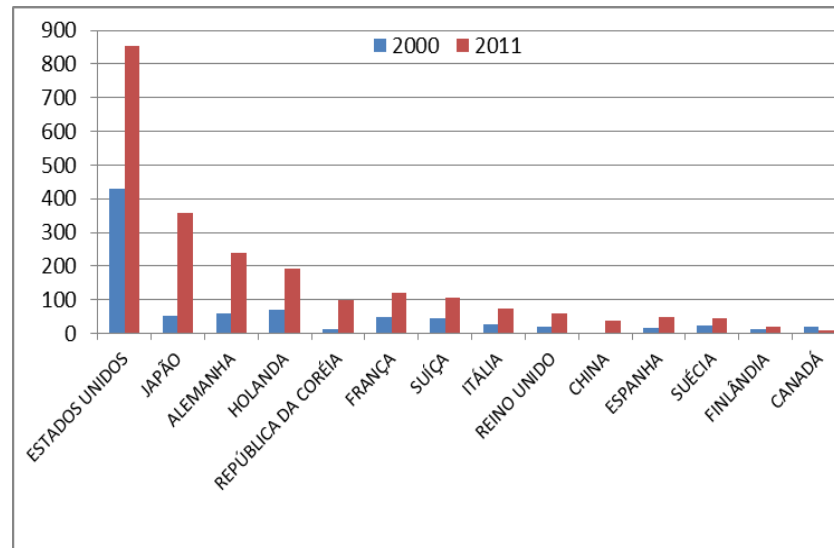


*Source: INPI's Statistical database (BADEPI)*

- Contrary to what occurs worldwide, industrial design applications in Brazil exhibit an increase of importance of non-resident share during the period (2000-2011).
- In 2000, 25% were non-resident and 75% resident applications .
- In 2011, 36% were non-resident and 64% resident applications .

## ***IP Use in Brazil – Industrial Designs***

Industrial design applications filed in Brazil by country of origin -2000 and 2011

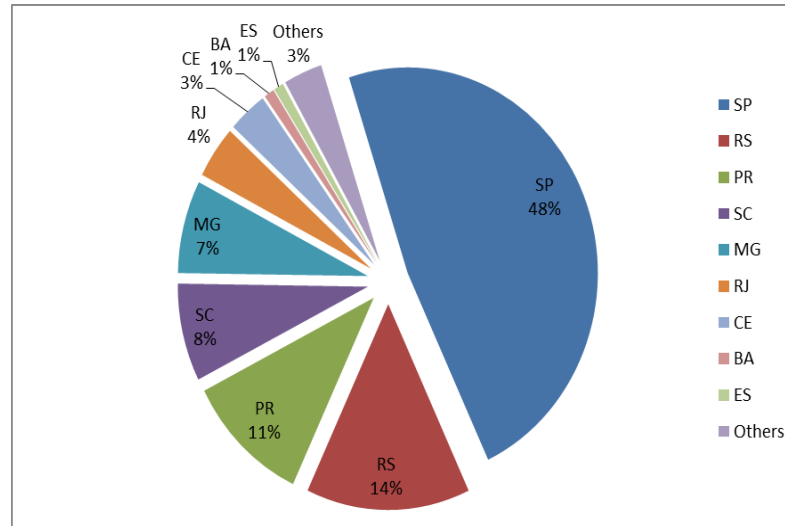


Source: INPI's Statistical database (BADEPI)

- Few countries explained the non-resident applications and their substantial growth between 2000 and 2011.
- Residents from United States accounted for the most substantial growth (27%), in this period in question.
- Japan presented a strongly increase of 574%.

## ***IP Use in Brazil – Industrial Designs***

Industrial design applications filed in Brazil by state of origin of residents – period 2000-2011



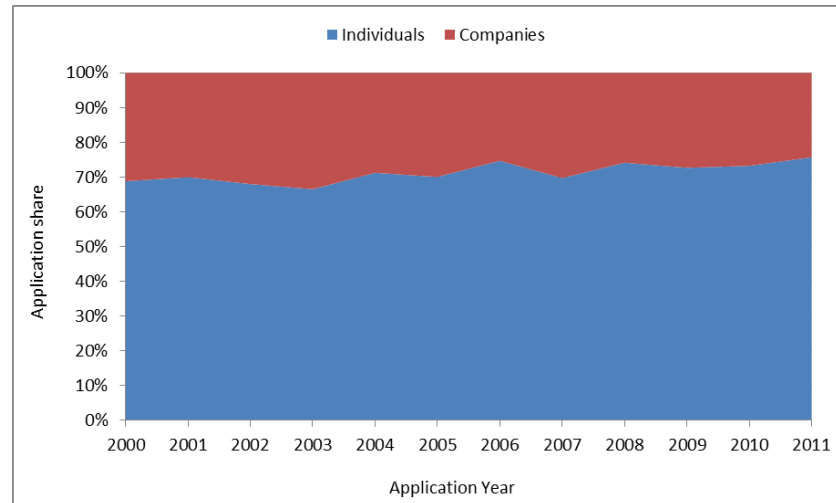
Source: INPI's Statistical database (BADEPI)

- Applications from São Paulo were the most representative and accounted for nearly all growth of resident applications during the period from 2000 to 2011 .
- Rio Grande do Sul (RS), Paraná (PR) and Santa Catarina (SC), the other representative states, are from South Region.



## ***IP Use in Brazil – Industrial Designs***

**Industrial design applications filed in Brazil by type of applicant – 2000-2011**



*Source: INPI's Statistical database (BADEPI)*

- The individuals are the principal applicants and their participation grew during the period (2000-2011).
- In 2000, individuals accounted for 2,479 filings (68.8% of total) and in 2011 individuals filled 5,176 industrial design applications (75.7%).

## IP Use in Brazil – Industrial Designs

Industrial design applications in Brazil by economic sector – 2006 and 2011

division	Economic Activities	2006	2006	2011	2011
<b>Total</b>	Total	1,353	100%	1,565	100%
<b>15</b>	Manufacture of leather and related products	140	10.3%	362	23.1%
<b>27</b>	Manufacture of electrical equipment	67	5.0%	139	8.9%
<b>29</b>	Manufacture of motor vehicles, trailers and semi-trailers	94	6.9%	138	8.8%
<b>22</b>	Manufacture of rubber and plastics products	113	8.4%	129	8.2%
<b>32</b>	Other manufacturing	86	6.4%	119	7.6%
<b>46</b>	Wholesale trade, except of motor vehicles and motorcycles	74	5.5%	98	6.3%
<b>47</b>	Retail trade, except of motor vehicles and motorcycles	62	4.6%	89	5.7%
<b>28</b>	Manufacture of machinery and equipment	71	5.2%	86	5.5%
<b>31</b>	Manufacture of furniture	93	6.9%	72	4.6%
<b>25</b>	Manufacture of fabricated metal products, except machinery and equipment	126	9.3%	58	3.7%
<b>20</b>	Manufacture of chemicals and chemical products	35	2.6%	38	2.4%

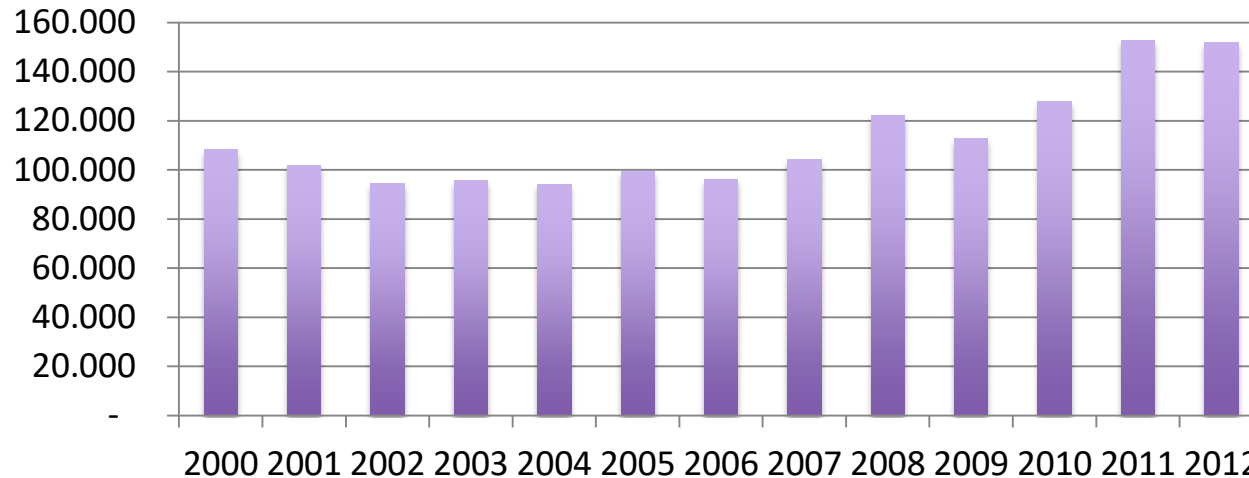
Manufacture of leather was the largest sector

Manufacture of fabricated metal products, except machinery and equipment lost its importance

Source: INPI's Statistical database (BADEPI)

## ***IP Use in Brazil – Trademarks***

Trademark applications – 2000-2012



Source: INPI's Statistical database (BADEPI)

- The demand for protection of trademarks in Brazil presented a significant growth. Comparing the years 2000 and 2012, the interest of firms and individuals in receiving the registration of their trademarks increased about 40%.

## ***IP Use in Brazil – Trademarks***

Trademark applications by nature, 2000-2012

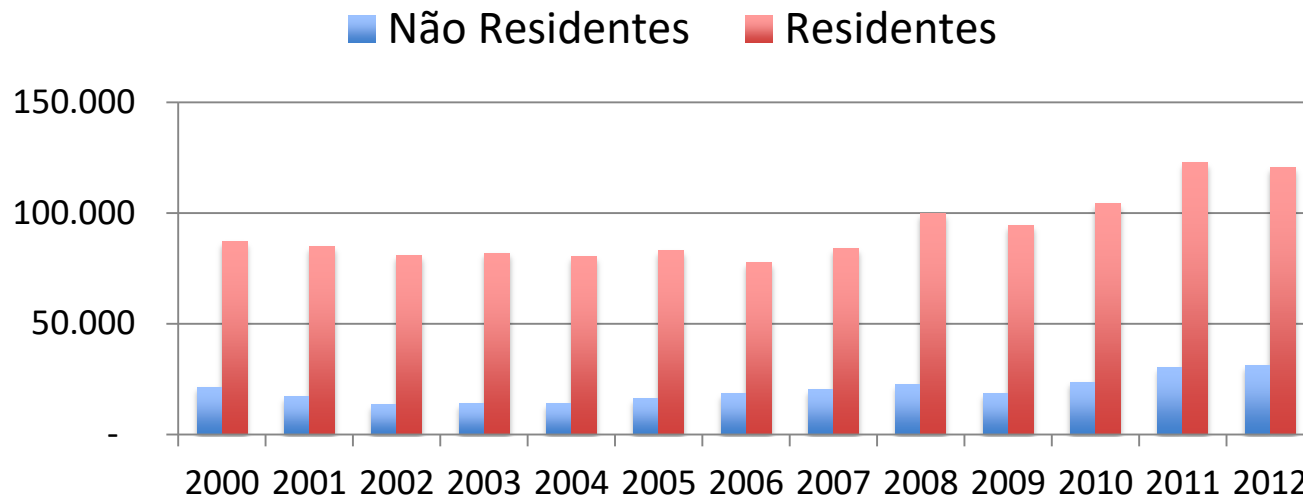


Source: INPI's Statistical database (BADEPI)

- From the point of view of the use of the trademarks, those intended to distinguish goods and services account for almost all deposits. The others, collective and certification are not representative.

## ***IP Use in Brazil – Trademarks***

Trademark applications by origin - 2000-2012

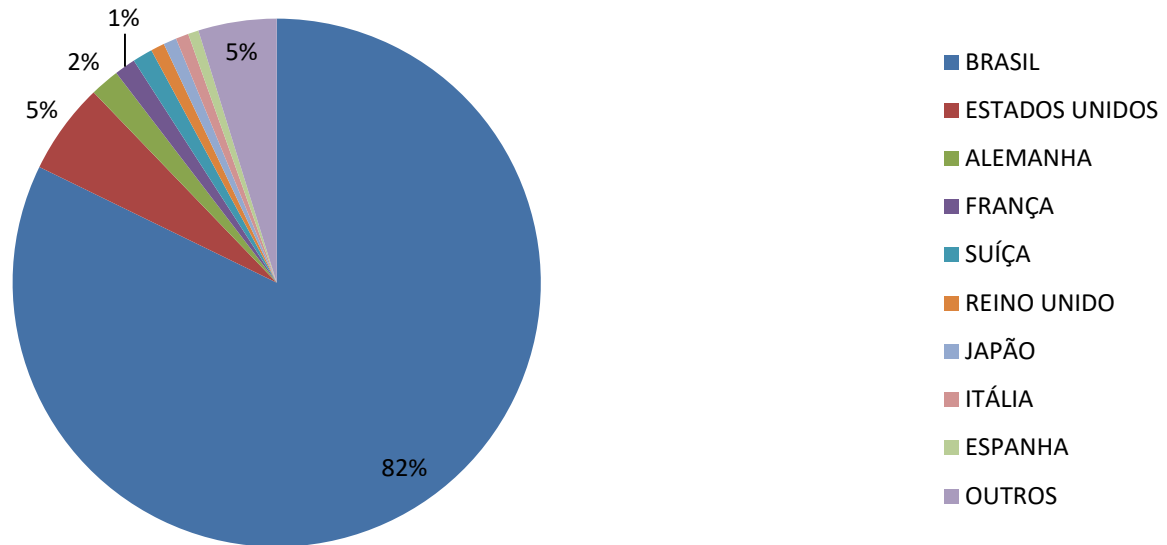


Source: INPI's Statistical database (BADEPI)

- Most depositors, more than 80%, is composed of resident applicants.
- About 40% of them are micro or small companies, according to classification obtained by the Brazilian Institute of Geography and Statistics-IBGE.

## ***IP Use in Brazil – Trademarks***

Trademark applications by country of origin – period 2000-2012

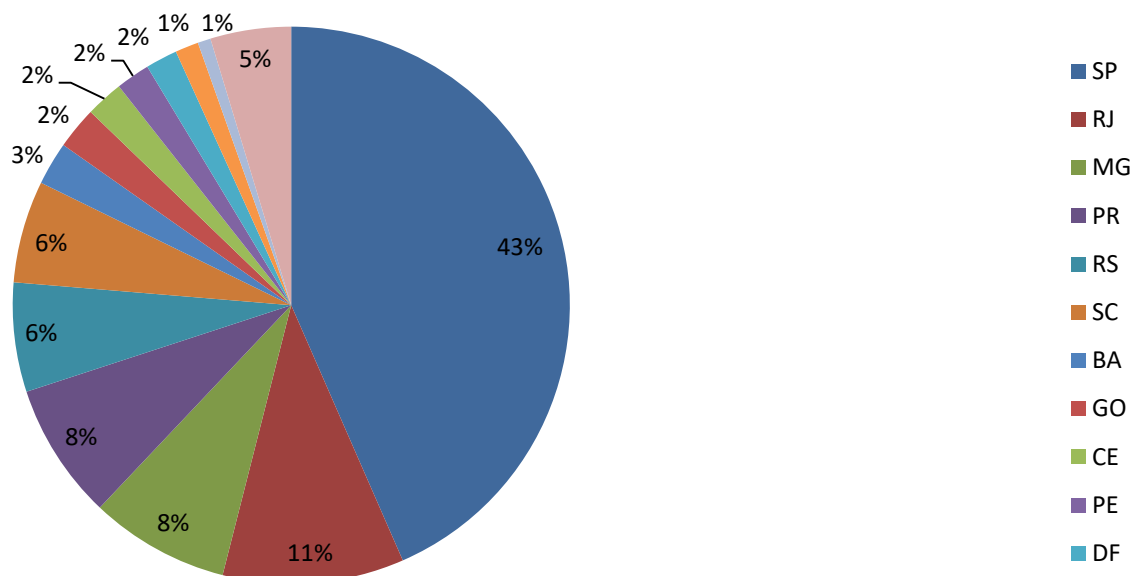


Source: INPI's Statistical database (BADEPI)

- Non-residents trademark applications accounted for only 18% during the period in question.
- Applications from few countries were the most representative: United States (5%), Germany (2%), France and Switzerland (both with 1%), the first from the geographic region of North America and the rest of Europe.

## ***IP Use in Brazil – Trademarks***

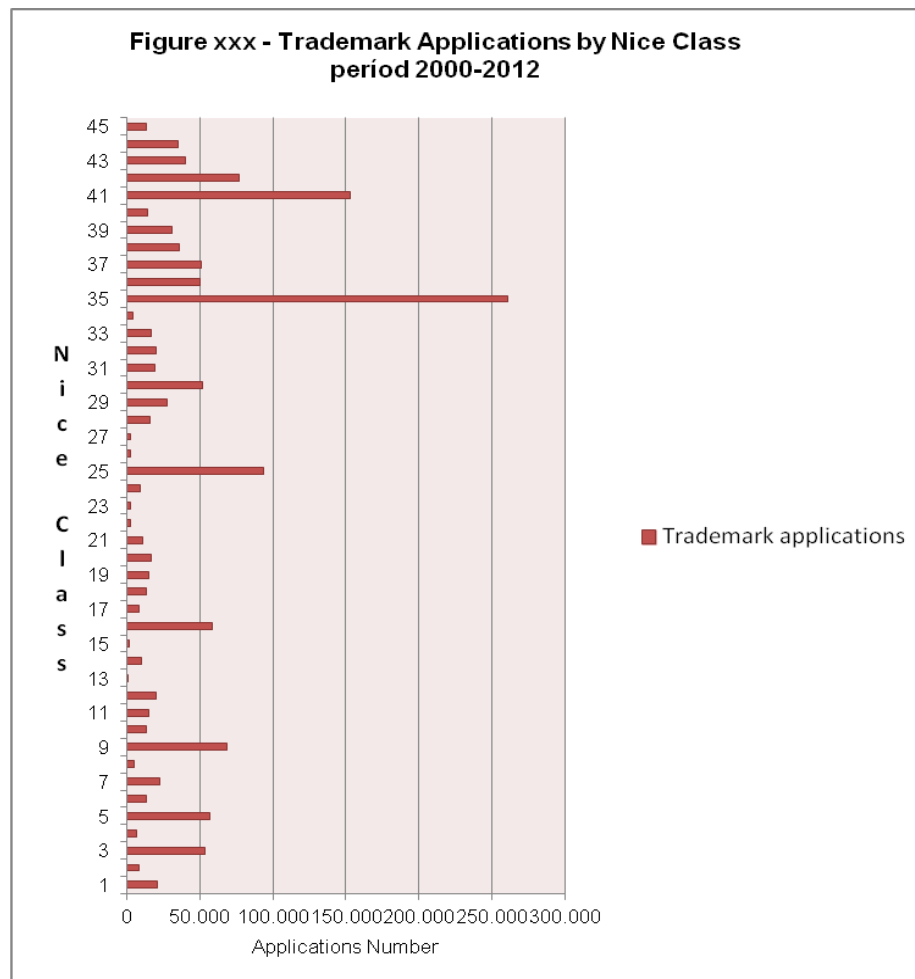
Trademark applications by Brazilian states – period 2000-2012



Source: INPI's Statistical database (BADEPI)

- States of São Paulo (SP), Minas Gerais (MG) and Rio de Janeiro (RJ) are the economically most developed Brazilian states and located in the southeastern region, participating with approximately 60% of deposits; the second, bringing together the States of Paraná (PR), Rio Grande do Sul (RS) and Santa Catarina (SC), representing 20% of the deposits.

## IP Use in Brazil – Trademarks

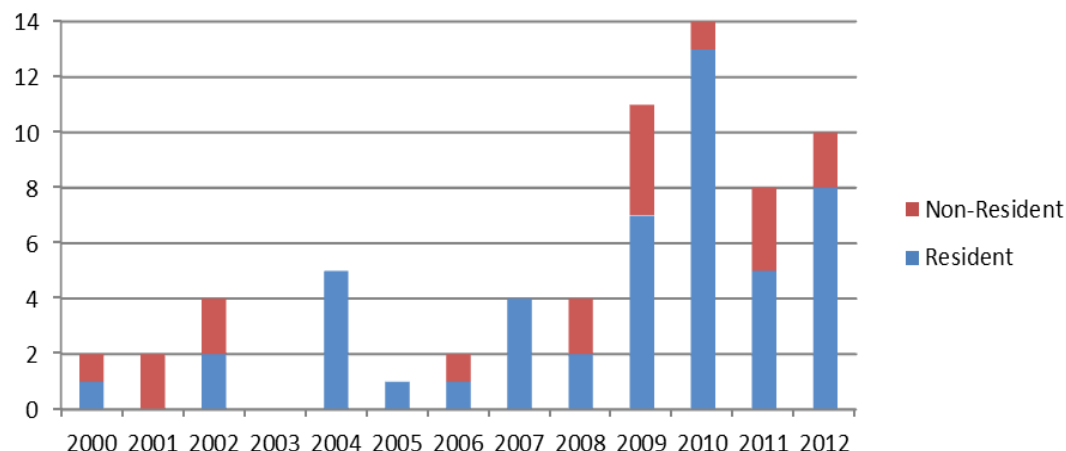


Source: INPI's Statistical database (BADEPI)

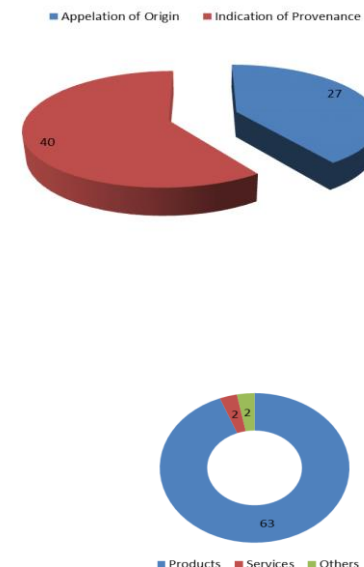


## IP Use in Brazil – Geographical Indications

Geographical Indication Applications



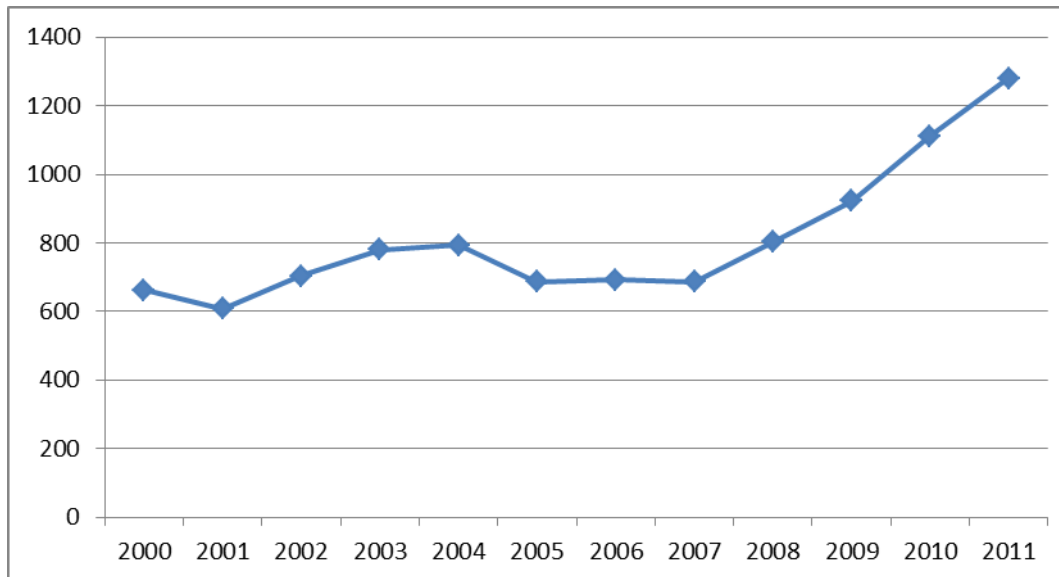
Source: INPI's Statistical database (BADEPI)



- In Brazil, the application and the resulting registrations of GI are incipient, but the national interest for this certification is increasing.
- In the period 2000-2012, there were 67 applications and a total of 39 registrations.
- The growth of applications after 2009 is mainly a result of resident applications increase.

## ***IP Use in Brazil – Software***

Number of software applications – 2000-2011

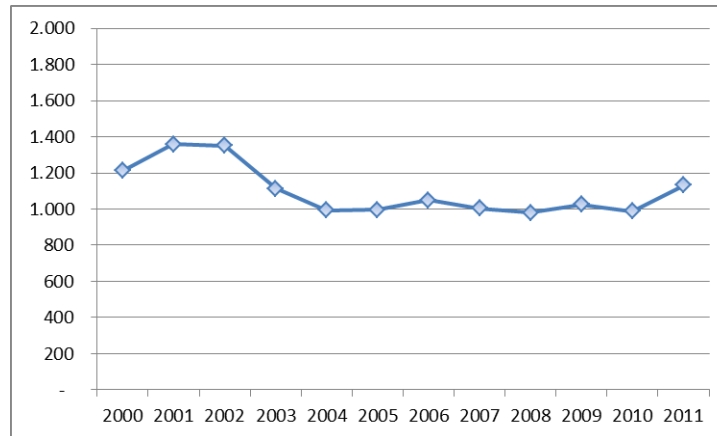


Source: INPI's Statistical database (BADEPI)

- Between 2000 and 2011, the total number of software applications at INPI-Brazil increased from 663 to 1,279.
- Since 2007, the applications show a continuous trend of substantial growth, having increased by 86% until 2011 (from 686 to 1,279).

## ***IP Use in Brazil – Technological Contrats***

**Number of Contracts Submitted Registered in INPI – 2000-2011**

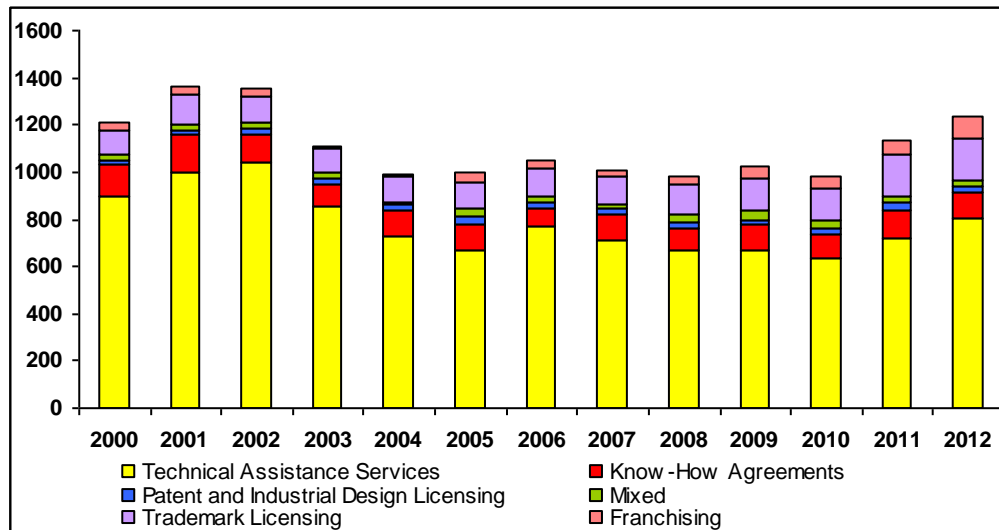


**Source:** INPI, Directory of Contracts, Geographical Indications and Registers, Coordinator-General for Tecnology Contracts.

- Between 2000 and 2011, the total number of new contracts registered in INPI fell by 6.7% from 1,212 to 1,131.
- In 2011, the number of new contracts recovered (+14.6%) but still remained lower compared to 2000.
- In terms of business type contracts for technology imports accounted, on average, 90% of the total and internal contracts (among residents) accounted for an average of 6%. Contracts for technology exports were underrepresented in the total contracts.

## IP Use in Brazil – Technological Contrats

Number of Contracts by Type Related Industrial Property and Technology Transfer – 2000-2012



**Source:** INPI, Directory of Contracts, Geographical Indications and Registers, Coordinator-General for Technology Contracts.

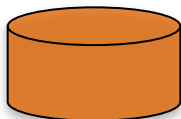
- Contracts for the provision of technical assistance services accounted for the largest portion of the total contract endorsed, although its share has declined over the period (from 74% in 2000 to 65% in 2012).
- Trademark Licensing and Franchising contracts showed increased participation over the period, from 12% of total registrations in 2000 to 22% in 2012.
- Contracts for the supply of technology (Know-How Agreements), contracts for exploitation of patents and industrial designs and combined modality contracts maintained their share stable close to 15%.

## ***Agenda INPI/AECON***

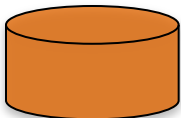
- **2013: ongoing**
  - ✓ New Copies of the Production Databases to check for Updates
  - ✓ List of Procedures: treatments using others DBs
  
- **2014:**
  - ✓ National study on intellectual property and small and medium sized enterprises
  - ✓ Intensity of use of intellectual property by national industries / sectors
  - ✓ Complementarity of use of different forms of protection by national industries / sectors

## INPI's Production Databases

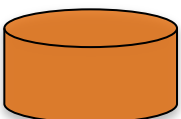
Patents



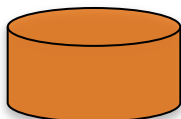
Trademarks



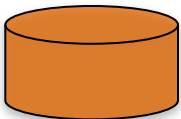
Industrial Designs



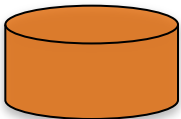
Software



Geographical Indications



Tech. Contracts



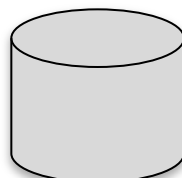
**Dynamics!!!**

Insert new records

Correction of records

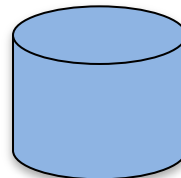
## INPI's Statistical Database

Copies of the  
Production Databases



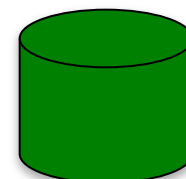
Queries  
"DE PARA"

BADEPI v1.0



Treatments:  
RAIS, IBGE,  
PCT/WIPO,  
ESPACENET  
= List of  
Procedures

BADEPI v2.0



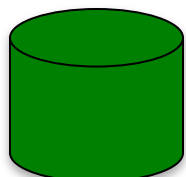
Treatments

Other



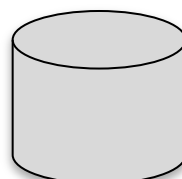
Contributions  
from Network

BADEPI v2.1

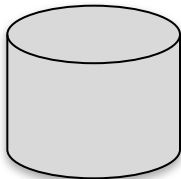


Re-applies  
List of  
Procedures

New Copies of the  
Production Databases

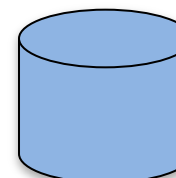


Checks  
updates



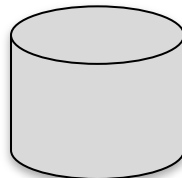
Incremental  
Database

BADEPI v3.0

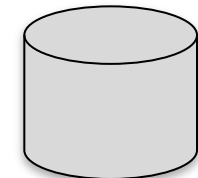


Re-applies  
List of  
Procedures

New Copies of the  
Production Databases

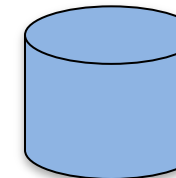


Checks  
updates



Incremental  
Database

BADEPI vN.0

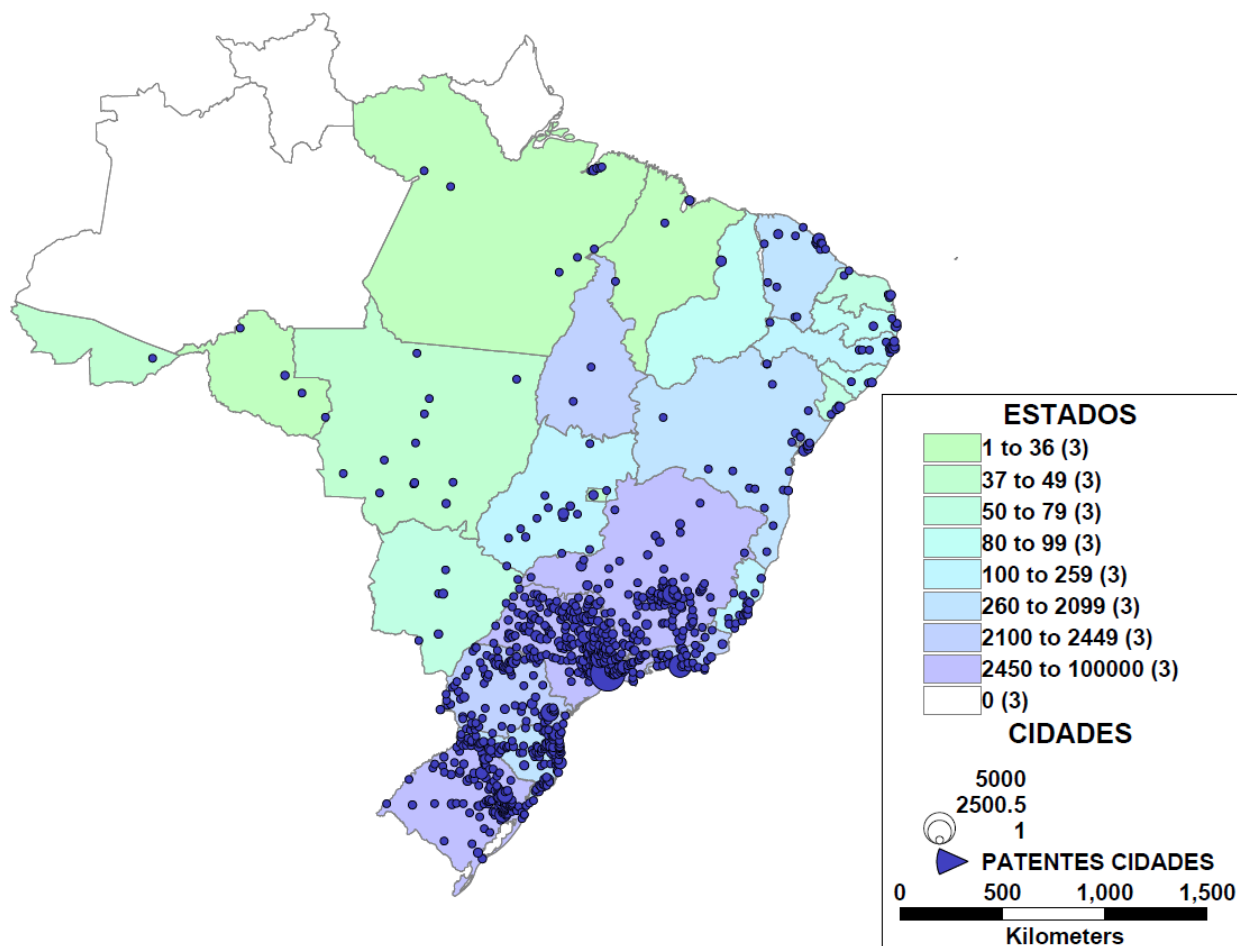


Database Updates

## Distribuição de Patentes por Cidades

### Depositante Pessoa Jurídica Nacional

### 2000 - 2011



## ***IP Use in Brazil – Conclusion***

- ✓ Evolution: IP use in Brazil is increasing (patents(pi+mu), trademarks,
- ✓ Domestic applications are mostly to protect trademarks, utility models, industrial designs, software and geographical indications.
- ✓ Brazil has a strong participation of universities, especially the public universities in patent applications.
- ✓ Foreign applications are mostly to protect patents (PI).
- ✓ Domestic applications are mostly from São Paulo (origin by Brazilian states)
- ✓ Foreign applications are mostly from United States (origin by country)
- ✓ More popular economic sectors (Brazilian applications): Trademarks (services – business; education; sporting activities); Industrial Designs (products – manufacture of leather; manufacture of machinery, equipment)
- ✓ Brazil has important opportunities to reinforce its IPRs System



## ***Thanks!***

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