

EUROPEAN COMPANIES : **THEIR USE OF IP IN CHINA**

Presentation plan

- **IP cooperation Europe China**
- **Patents statistics for measuring IP use**
- **Comparison with USA, Japan, Korea**
- **Respective contribution of European countries**
- **Top applicants from Europe in China**
- **Royalties and licence fees**
- **Trade Goods**
- **FDI flows**

Brief history of IP Europe China relationship

- **1979 IP delegation from China in Munich**
- **1980 European delegation to Beijing and Shanghai**
- **1984 First IP law in China**
- **1985 First applications from Europe**
- **1987 Creation of SIPO**
- **1980-1987 numerous Chinese patent engineers staying in EPO and in DPMA**
- **1994 EPOQUE system (EPO search tools) in SIPO**

Patents statistics for measuring IP use

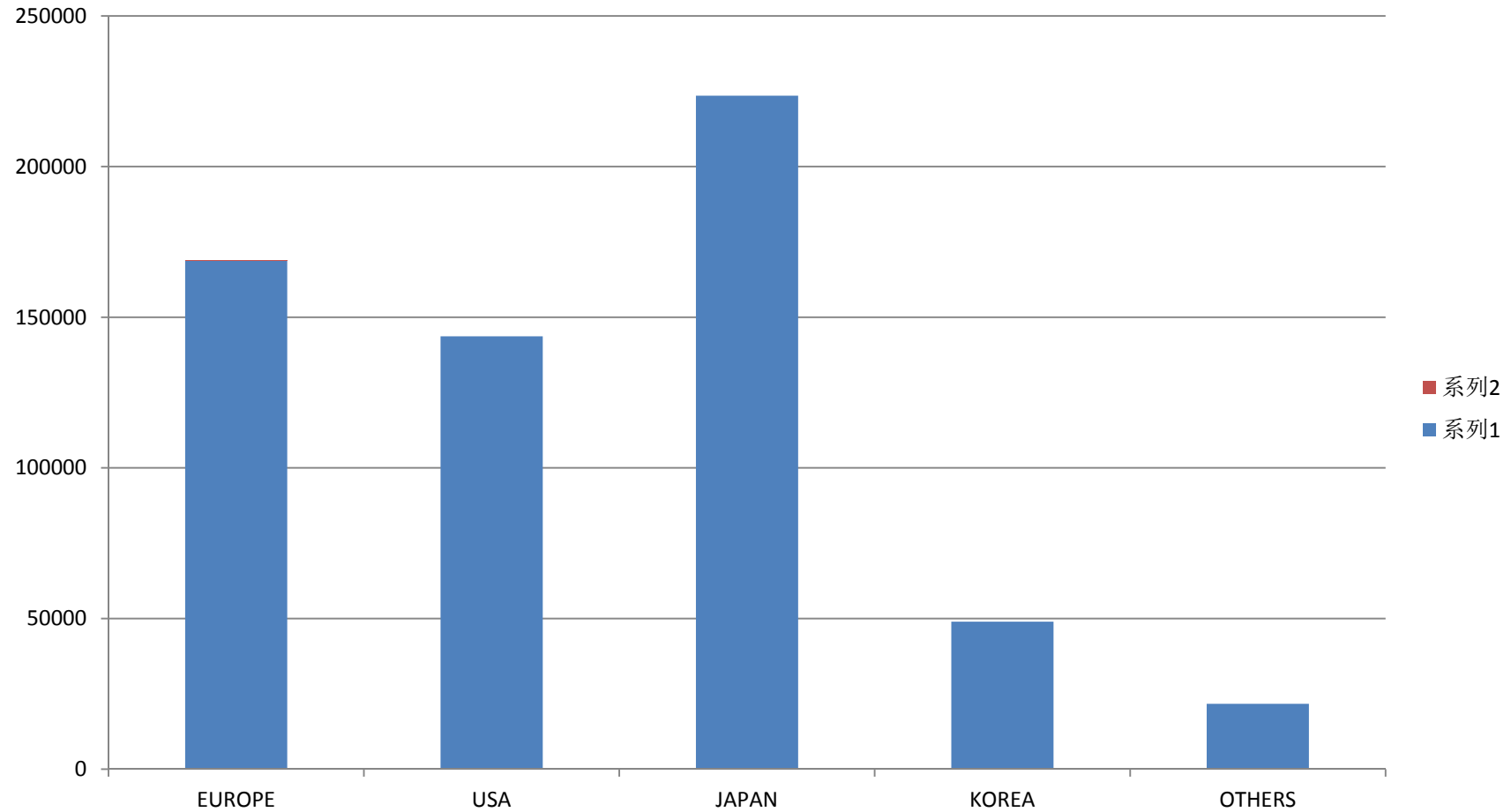
- **Statistics from SIPO**
- **Europe Means EPO Members States (38) not
European Union (28)**
- **European figures are estimated**

Filings 1985 - 2006

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 168886 | 28 |
| USA | 143658 | 23,6 |
| JAPAN | 223545 | 36,8 |
| KOREA | 48971 | 8 |
| OTHERS | 21688 | 3,5 |
| Total | 606748 | |

EU and US: Average 7000-8000 /year
Japan Higher volume :10000:year
EU, US, Japan, Korea = 96% filings

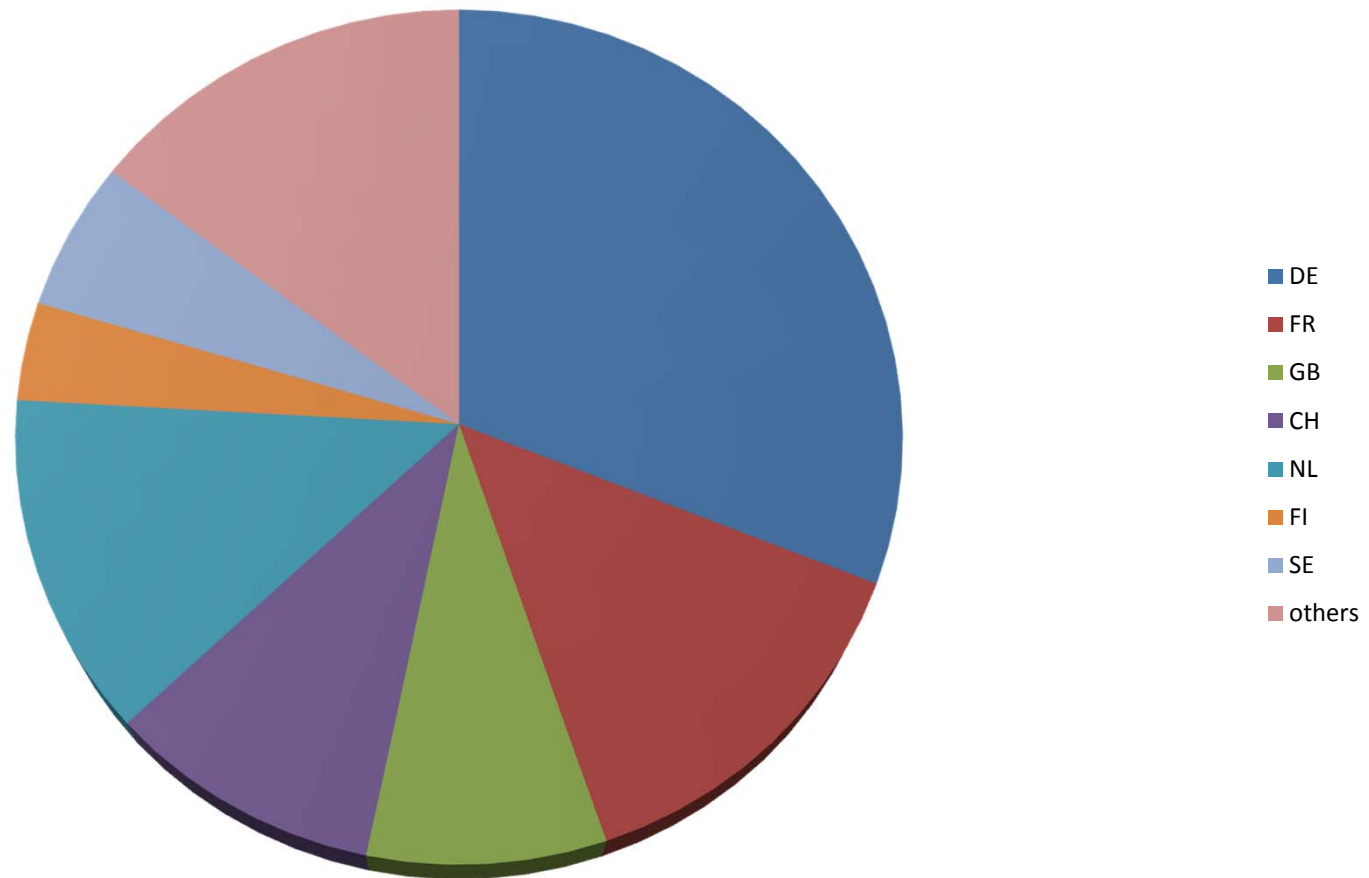
Filings 1985 - 2006



Distribution in European Countries 1985 - 2006

| EUROPEAN countries | Applications 1985 - 2006 | % | average/year | Grants 1985 -2006 | % | Grants/ Applications (%) |
|--------------------|--------------------------|------|--------------|-------------------|------|--------------------------|
| DE | 52352 | 30,7 | 2600 | 21393 | 29,5 | 41 |
| FR | 23278 | 13,6 | 1150 | 10259 | 14,1 | 44 |
| GB | 14303 | 8,4 | 700 | 6021 | 8,3 | 42 |
| CH | 16556 | 9,8 | 800 | 7960 | 11 | 48 |
| NL | 21686 | 12,8 | 1050 | 7800 | 10,7 | 36 |
| FI | 6273 | 3,7 | 300 | 2778 | 3,8 | 44 |
| SE | 9571 | 5,6 | 470 | 4571 | 6,3 | 48 |
| Others | 24867 | 14,7 | 1200 | 11596 | 6,8 | 47 |
| Total | 168886 | | | 72378 | | |

Distribution in European Countries 1985 - 2006

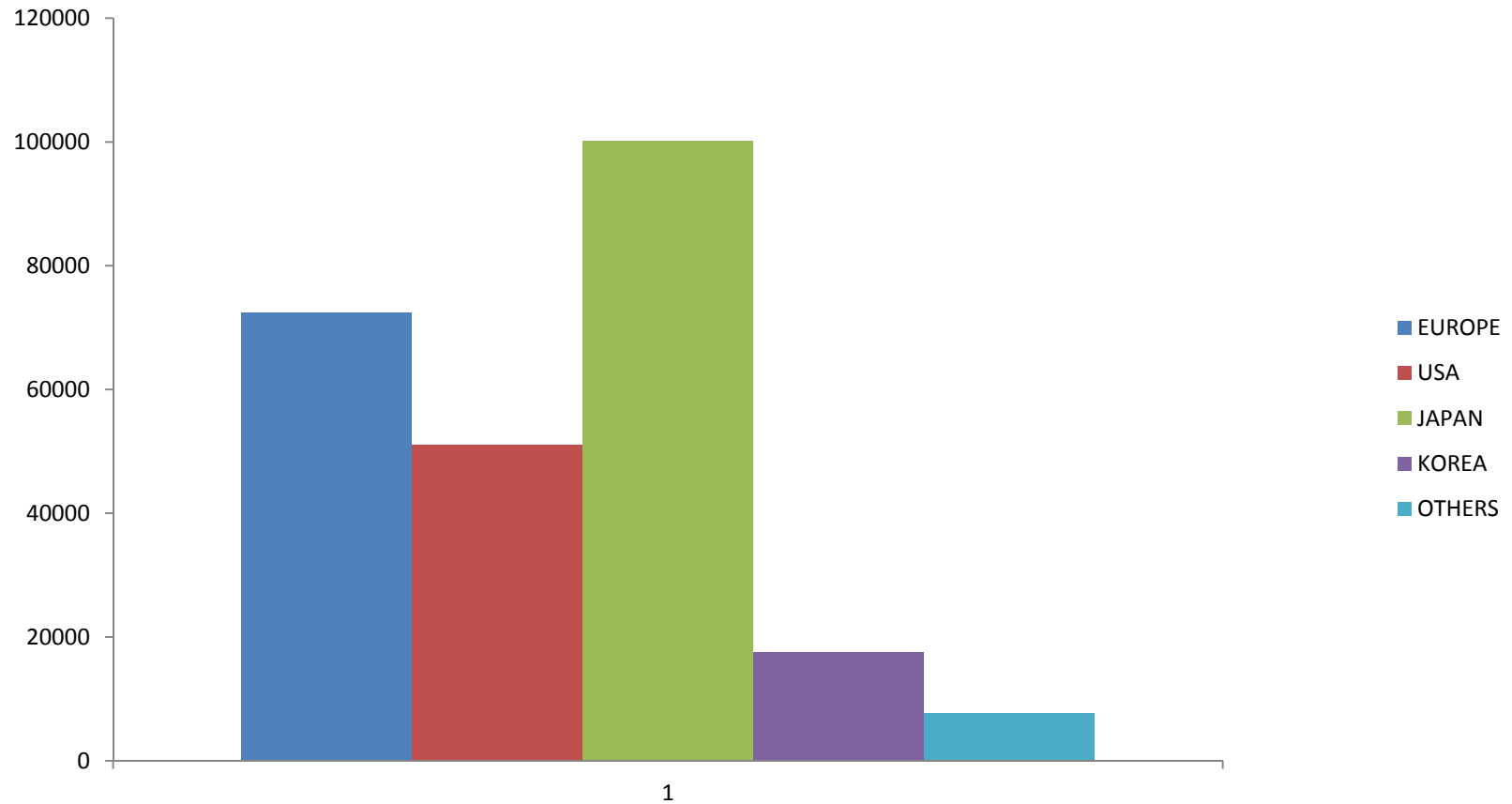


Grants 1985 - 2006

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 72378 | 29 |
| USA | 50944 | 20,5 |
| JAPAN | 100194 | 40,3 |
| KOREA | 17591 | 7 |
| OTHERS | 7650 | 3,2 |
| Total | 248757 | |

Same comments as for filings
Average granting rate: 43%

Grants 1985 - 2006

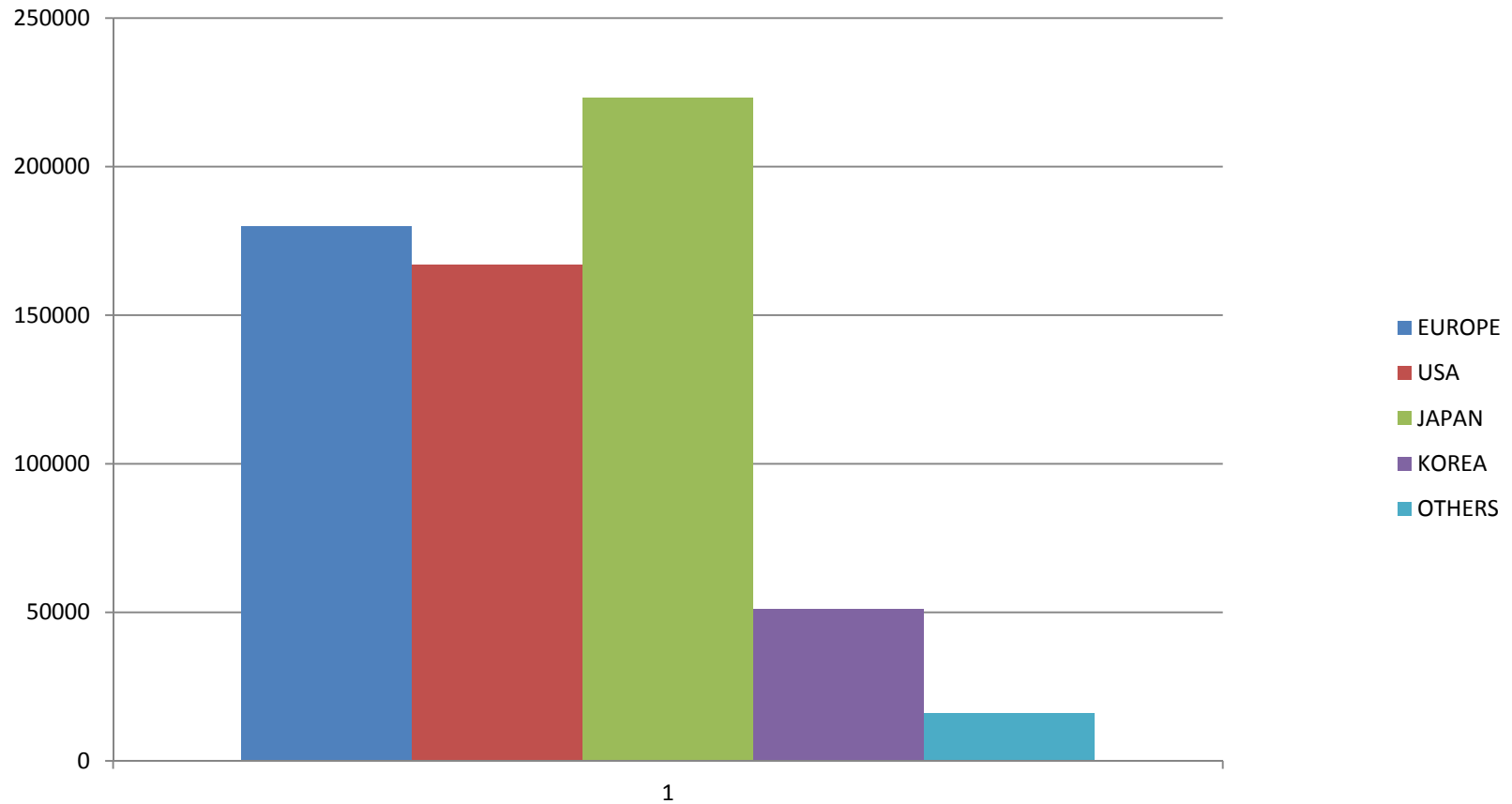


Filings 2007 - 2013

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 180000 | 28,3 |
| USA | 166909 | 26,2 |
| JAPAN | 223075 | 35 |
| KOREA | 51003 | 8 |
| OTHERS | 15876 | 2,5 |
| Total | 636863 | |

Same volume of filings and grants in 7 years as in the previous period of 20 years
Average filing/year 25000 for EU and US,
30000 For Japan

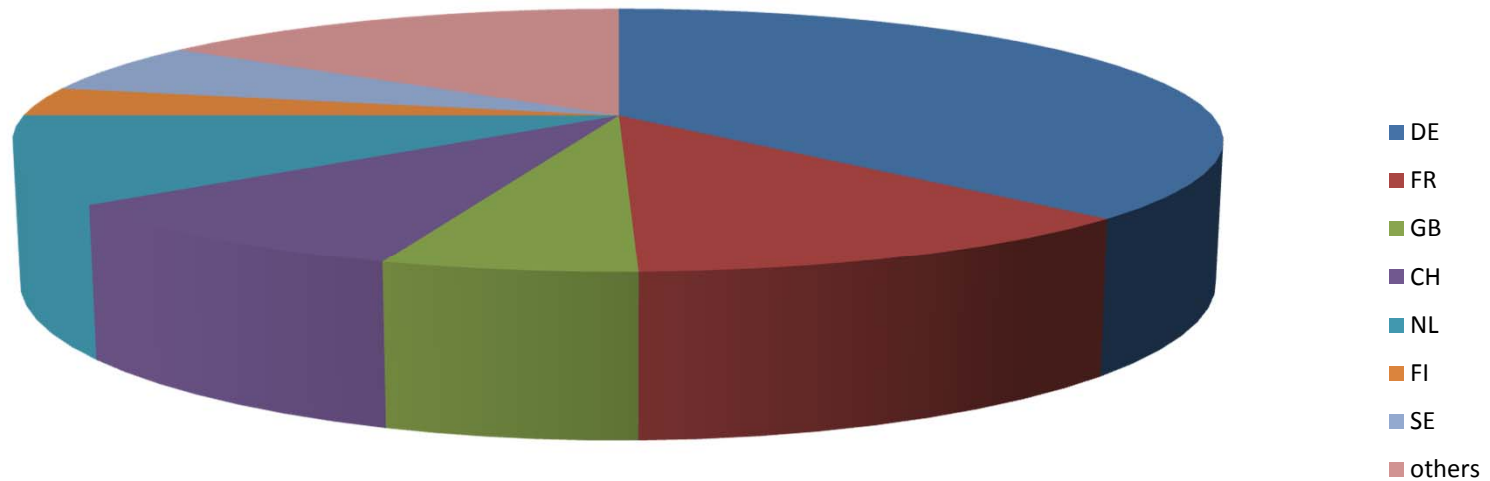
Filings 2007 - 2013



Distribution in European Countries 2007 - 2013

| EUROPEAN countries | Applications 2007 - 2013 | % | average/year | Grants 1985 -2006 | % | Grants/ Applications (%) |
|--------------------|--------------------------|------|--------------|-------------------|------|--------------------------|
| DE | 67385 | 37,4 | 10000 | 31407 | 36,6 | 46,6 |
| FR | 21848 | 12,1 | 3000 | 11580 | 13,4 | 53 |
| GB | 10262 | 5,7 | 1500 | 4222 | 4,9 | 41,1 |
| CH | 16330 | 9,6 | 2300 | 7366 | 8,5 | 45,1 |
| NL | 19239 | 10,6 | 2700 | 10823 | 12,5 | 56 |
| FI | 6319 | 3,5 | 900 | 3376 | 3,9 | 53,4 |
| SE | 11088 | 6,1 | 1600 | 5831 | 6,7 | 52,5 |
| Others | 27529 | 15 | 4000 | 10000 | 11,6 | 36,3 |
| Total | 180000 | | 26000 | 86000 | | |

Distribution in European Countries 2007 - 2013



Distribution of filings and grants in Europe from the origin

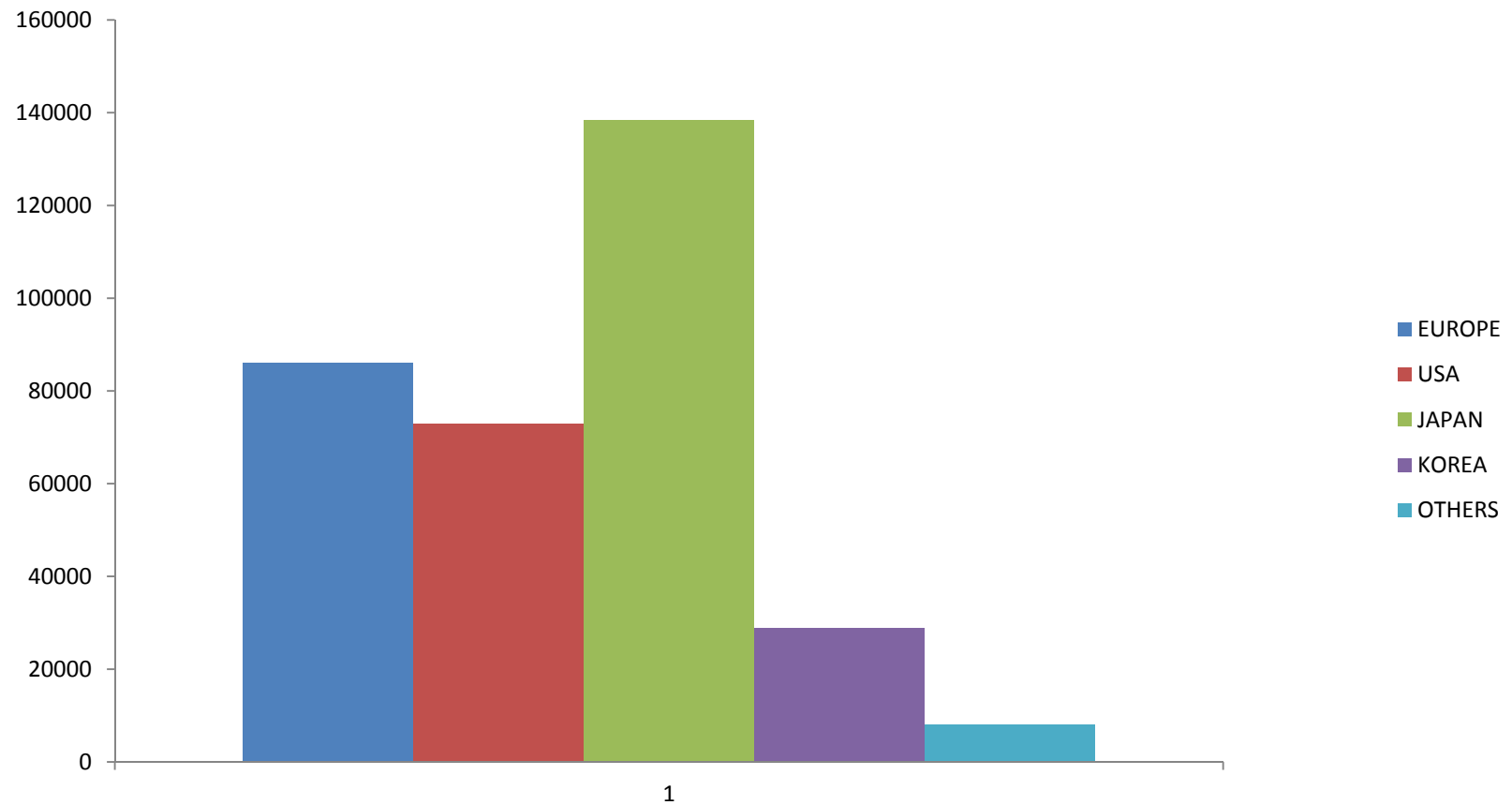
- **DE, FR, GB, CH, NL, SE, FI = 83% of the total**
- **DE: at the top position 35%**
- **FR: 3 times less**
- **GB: 6 times less**
- **CH and NL: 4 times less**

Grants 2007 - 2013

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 86000 | 25,8 |
| USA | 72908 | 21,8 |
| JAPAN | 138356 | 41,3 |
| KOREA | 28821 | 8,6 |
| OTHERS | 7954 | 2,5 |
| Total | 334039 | |

**The granting rate increases up to 50%
(EU and US), 60%(Japan and Korea)**

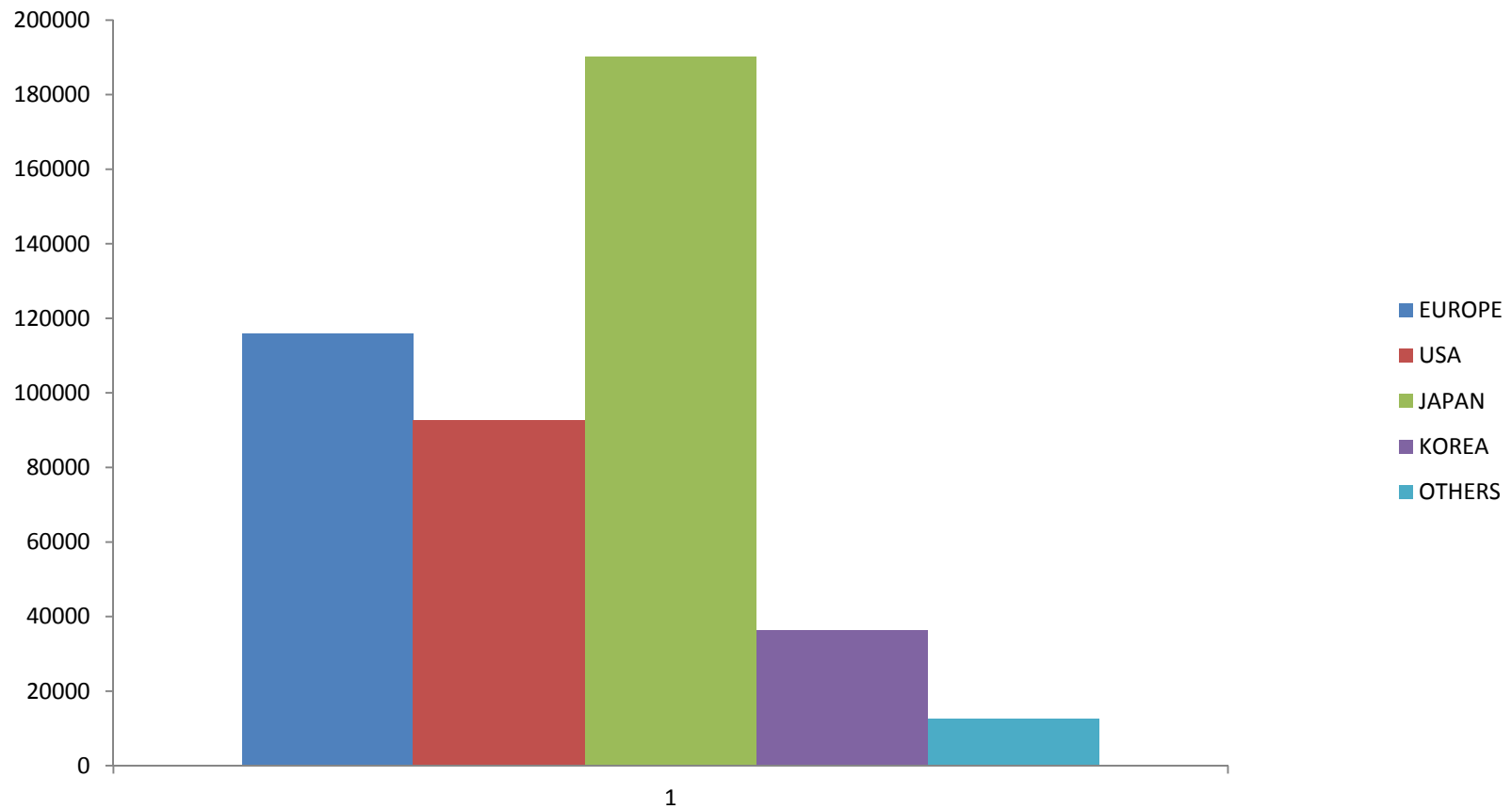
Grants 2007 - 2013



Valid inventions in 2013

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 115871 | 25,8 |
| USA | 92684 | 20,7 |
| JAPAN | 190007 | 42,4 |
| KOREA | 36372 | 8,12 |
| OTHERS | 12481 | 2,7 |
| Total | 447415 | |

Valid inventions in 2013



Ratio Valid inventions / Applications per origin

| Geographical zone | Number | % |
|-------------------|---------------|------|
| EUROPE | 115871/365450 | 31,7 |
| USA | 92684/310567 | 29,8 |
| JAPAN | 190007/442620 | 43 |
| KOREA | 36372/99974 | 36,3 |
| OTHERS | 12481/25000 | 50 |

Top applicants in EUROPE 1/2

- **Rather high concentration of applicants**
- **NL 78% from 1 company (Philips)**
- **90% from 4 companies (Shell, DSM, AKZO, Philips)**
- **SE 63% from Ericsson**
- **FI 75% from Nokia**

Top applicants in EUROPE 2/2

- **CH 50% from 4 companies (Roche, Novartis, ABB, Nestlé)**
- **DE 55% from 4 companies (Siemens, BASF, Bayer, Bosch)**
- **Exception for France 55% from 10 companies (Alcatel, Michelin, Orange, Schneider, Schlumberger, Sanofi, L'Oreal, Airbus, Valeo, Saint Gobain)**

EU international trade in services with China (royalties and licence fees) Millions €

| | 2010 | 2011 | 2012 |
|--------|------|------|------|
| Export | 1961 | 2156 | 2306 |
| Import | 89 | 79 | 126 |

EU international trade in goods

Billions €

| | 2010 | 2011 | 2012 |
|--------|-------|-------|-------|
| Export | 113,5 | 136,4 | 143,9 |
| Import | 283,6 | 294,8 | 291,1 |

DE 45%, FR 10%, UK 9%

EU FDI flows (billions) with China including Hong Kong

| | 2010 | 2011 | 2012 |
|-------|------|------|------|
| EU | 19 | 23 | 22 |
| CHINA | 14 | 11,5 | 9,3 |

Filings 2007-2013 per inhabitant

- **EU 3,6/10000**
- **US 8.5/10000**
- **JAPAN 18/10000**
- **KOREA 10/10000**

**Thank you for your kind
attention**