

# **Patenting from the Perspective of a Universities in a Developing Country - South Africa -**

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Council*

## **WIPO Workshop on PCT Fee Reduction for Universities**

*organized by the World Intellectual Property Organization (WIPO)*

*Geneva, June 18 2018*

# Presentation Outline

- ❑ Introduction
- ❑ South Africa PCT Applications
- ❑ Perceptions of PCT System from South African Publicly Financed Institutions
- ❑ Concluding Remarks

# Introduction

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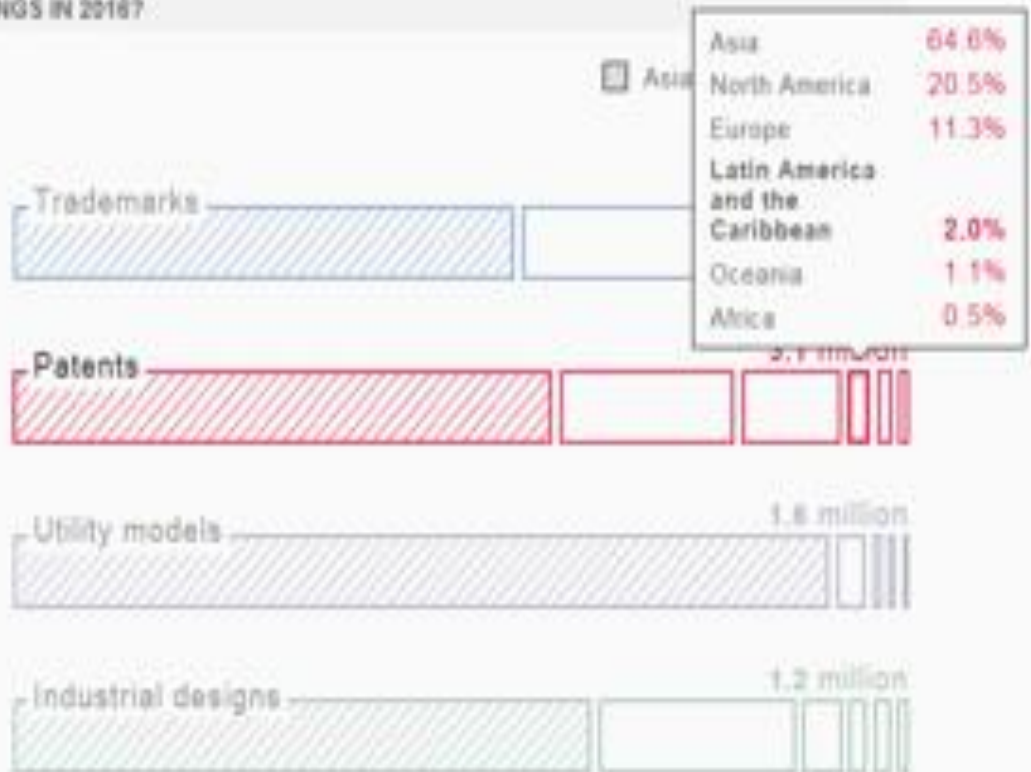
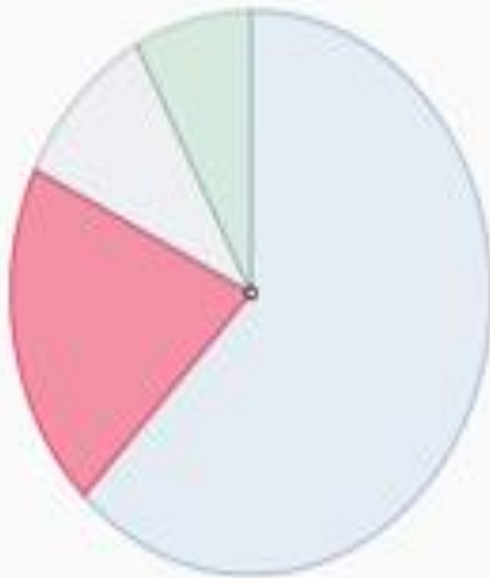
## South Africa's Patenting Trends in Context of Rest of Africa and the World

# Introduction

## *Global IP Filings and Africa's Contribution*

### Shares of IP filing activity by region

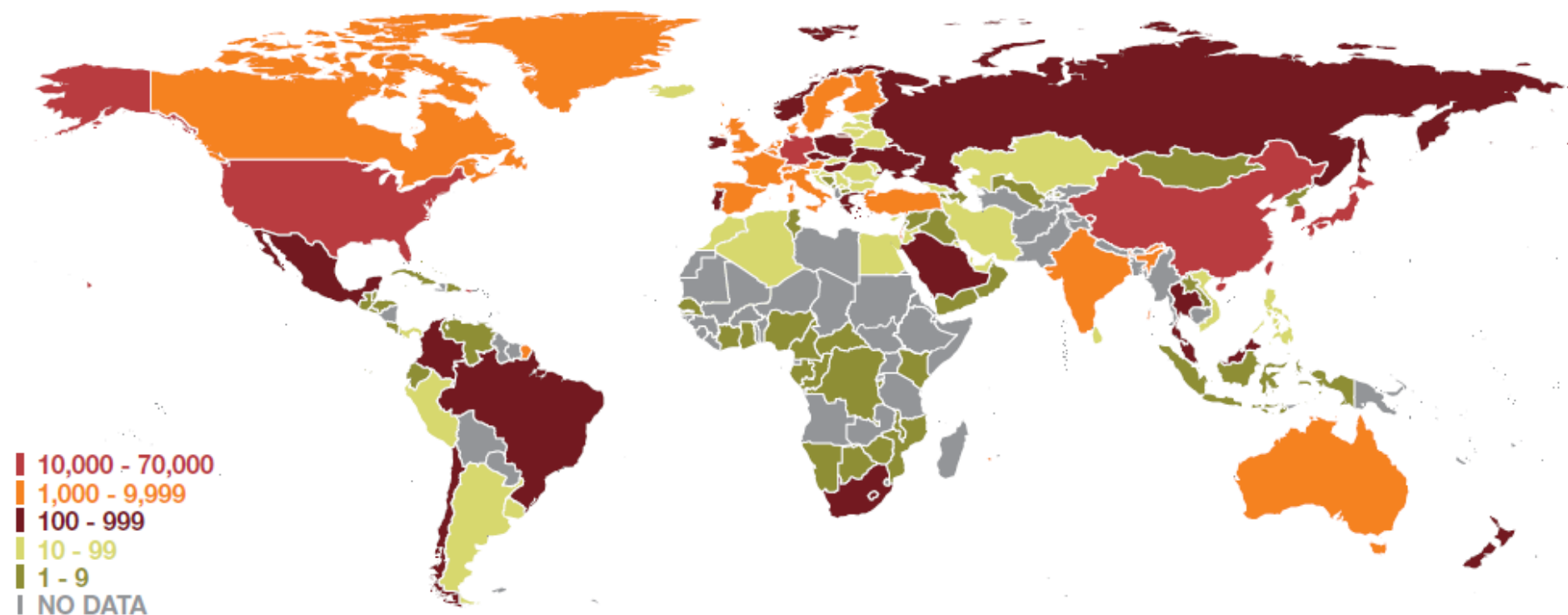
WHICH REGION RECEIVED THE BULK OF IP FILINGS IN 2016?



# Introduction

## *Geographical Distribution of Global PCT Applications*

### **PCT applications by origin, 2016**



Note: Data refer to the international phase of the Patent Cooperation Treaty System. Counts are based on the residency of the first named applicant and the international application date.

Source: WIPO Statistics Database, September 2017.

# Introduction

## *Africa's Contribution to Global PCT Applications*

### Patent applications by region

Region	Number of applications		Resident share (%)		Share of world total (%)		Average growth (%)
	2006	2016	2006	2016	2006	2016	2006-16
Africa	12,700	17,500	11.0	28.0	0.7	0.5	3.3
Asia	889,800	2,019,100	69.9	83.3	49.7	64.6	8.5
Europe	333,100	354,900	63.9	61.3	18.6	11.3	0.6
Latin America & the Caribbean	54,000	61,300	11.9	14.2	3.0	2.0	1.3
North America	468,000	640,300	48.6	46.8	26.1	20.5	3.2
Oceania	33,400	34,800	15.0	10.6	1.9	1.1	0.4
<b>World</b>	<b>1,791,000</b>	<b>3,127,900</b>	<b>60.0</b>	<b>70.9</b>	<b>100.0</b>	<b>100.0</b>	<b>5.7</b>

Note: Totals by geographic region are WIPO estimates using data covering 154 offices. Each region includes the following number of offices: Africa (29), Asia (43), Europe (45), Latin America & the Caribbean (30), North America (2) and Oceania (5).

Source: WIPO Statistics Database, September 2017.

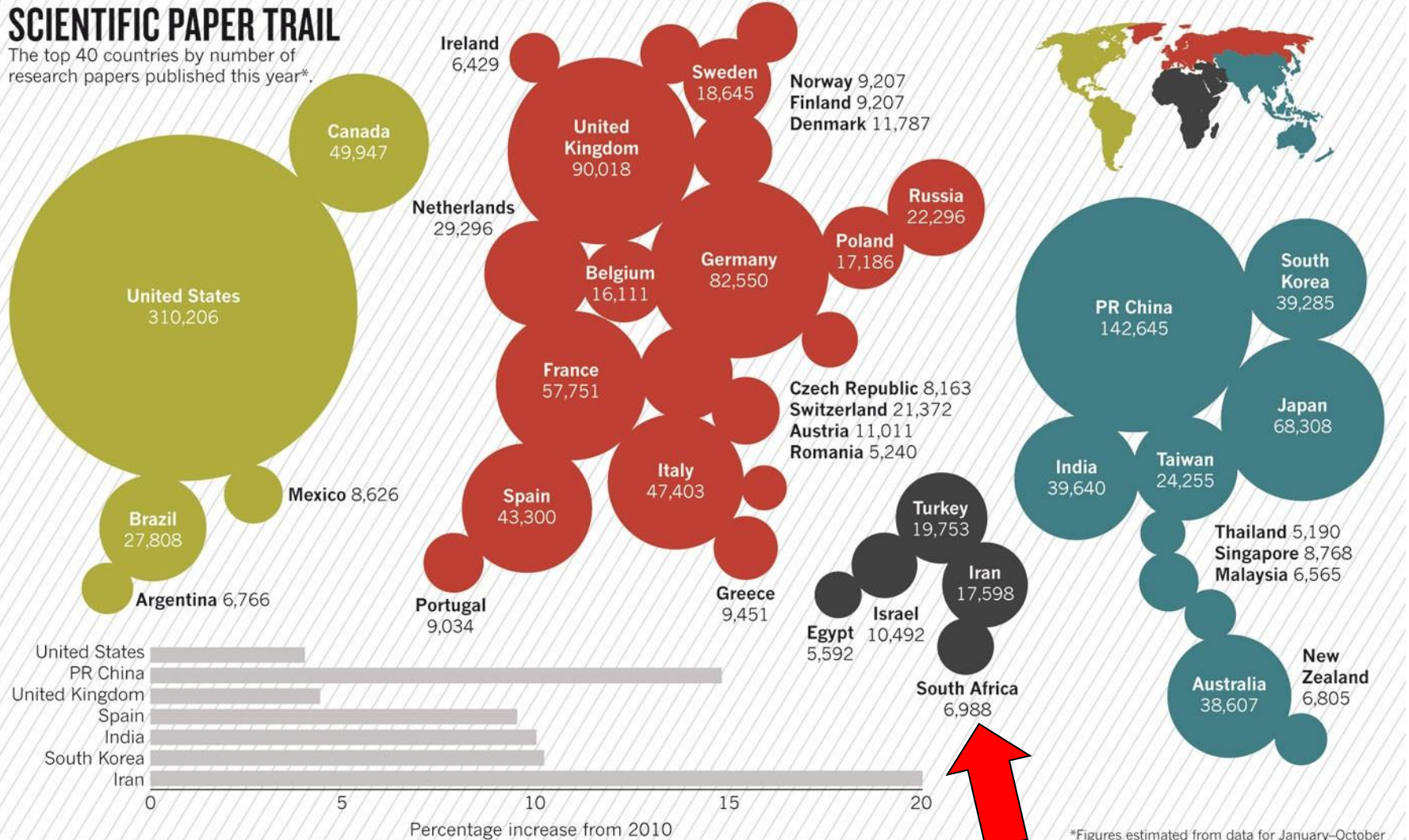
# South Africa - PCT Applications

# Global Scientific Knowledge Production

## South Africa

### SCIENTIFIC PAPER TRAIL

The top 40 countries by number of research papers published this year\*.



Source: <http://i.imgur.com/g5sdKFr.jpg>

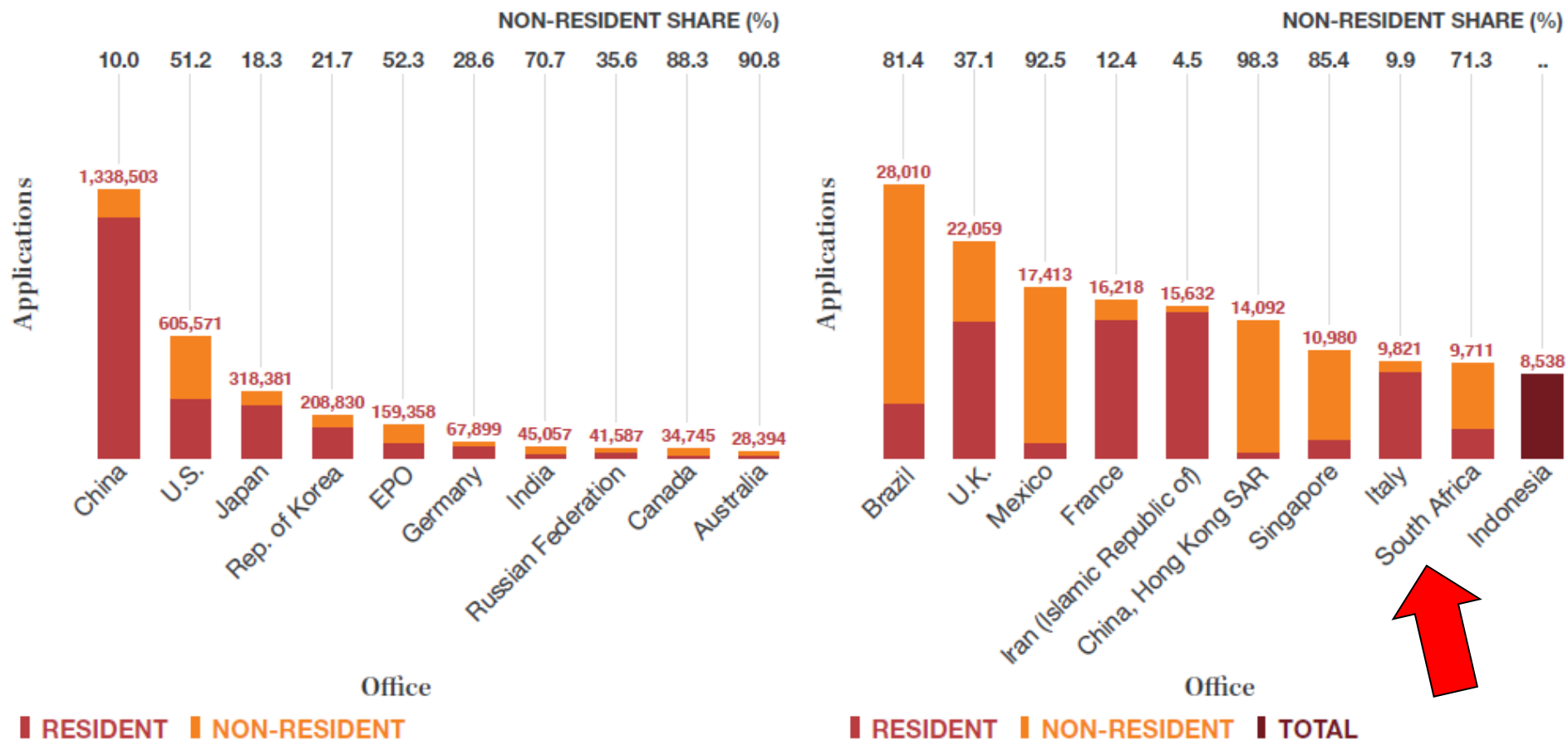
\*Figures estimated from data for January–October



# PCT Applications for Top 20 Offices

## South Africa

### Patent applications at the top 20 offices, 2016

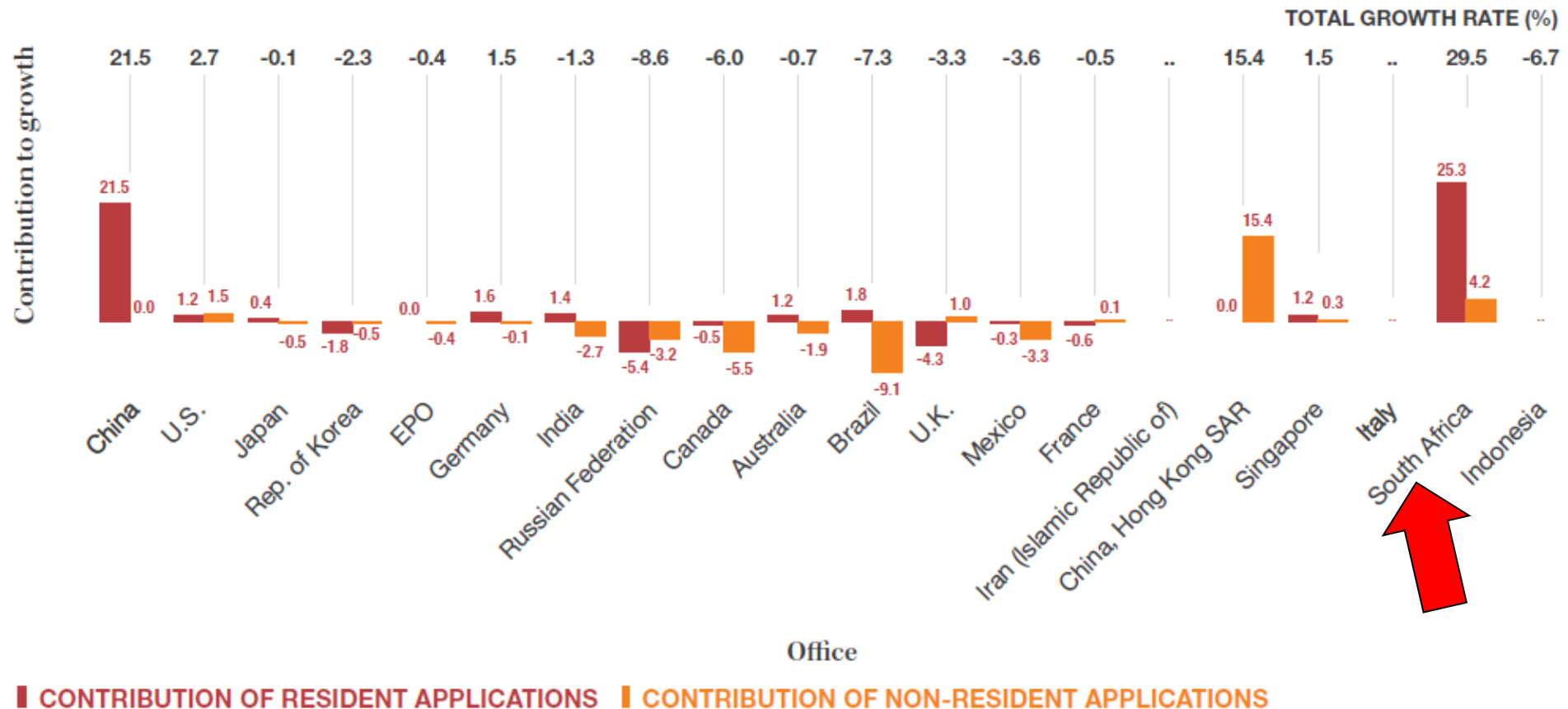


Source: PCT Yearly Reviews 2017 - [www.wipo.int/ipstats](http://www.wipo.int/ipstats)

# PCT Applications for Top 20 Offices

## South Africa – Growth in Filings by Residents

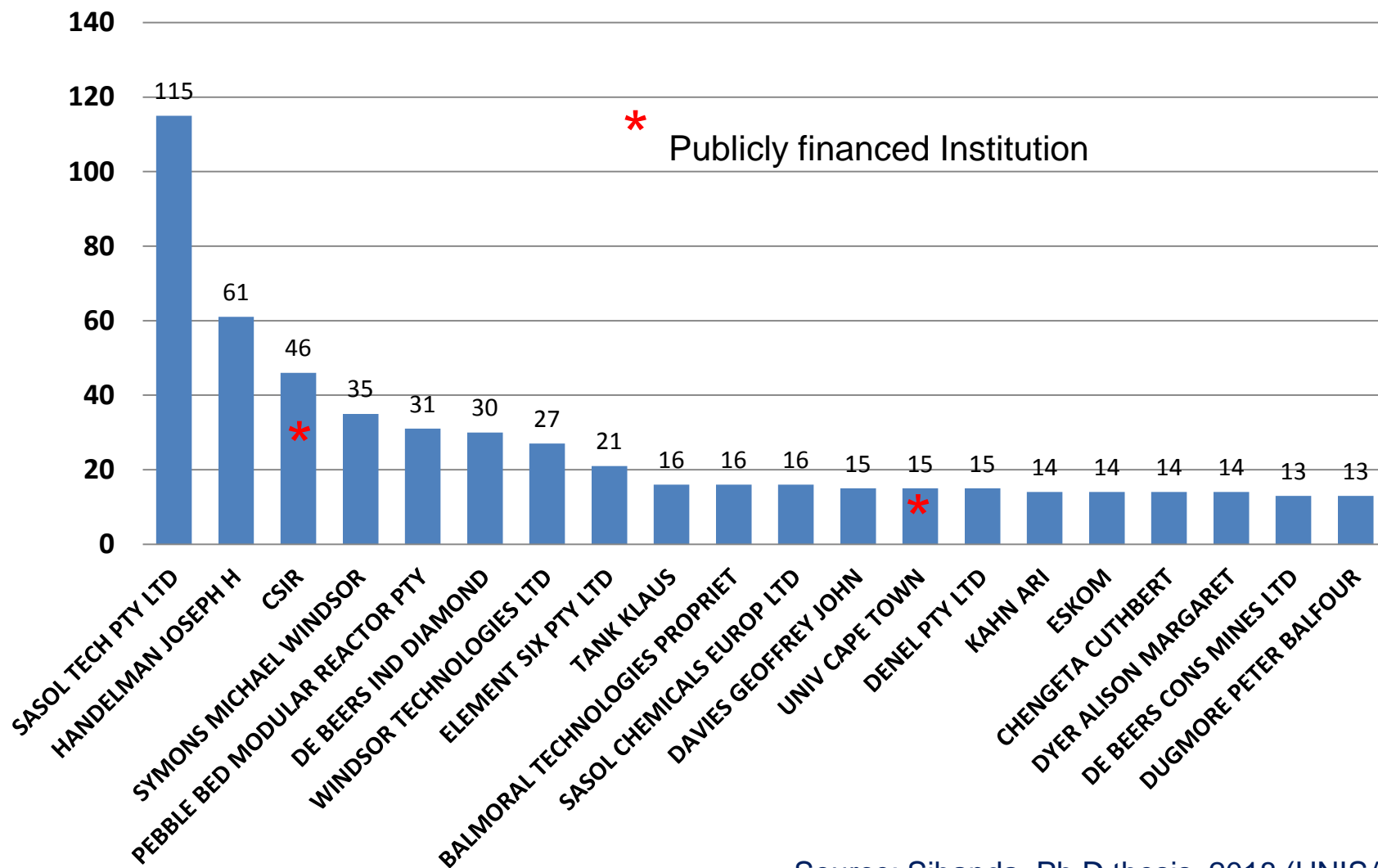
**Contribution of resident and non-resident applications to total growth for the top 20 offices, 2015-16**



Source: PCT Yearly Reviews 2017 - [www.wipo.int/ipstats](http://www.wipo.int/ipstats)

# PCT Applications by South Africans

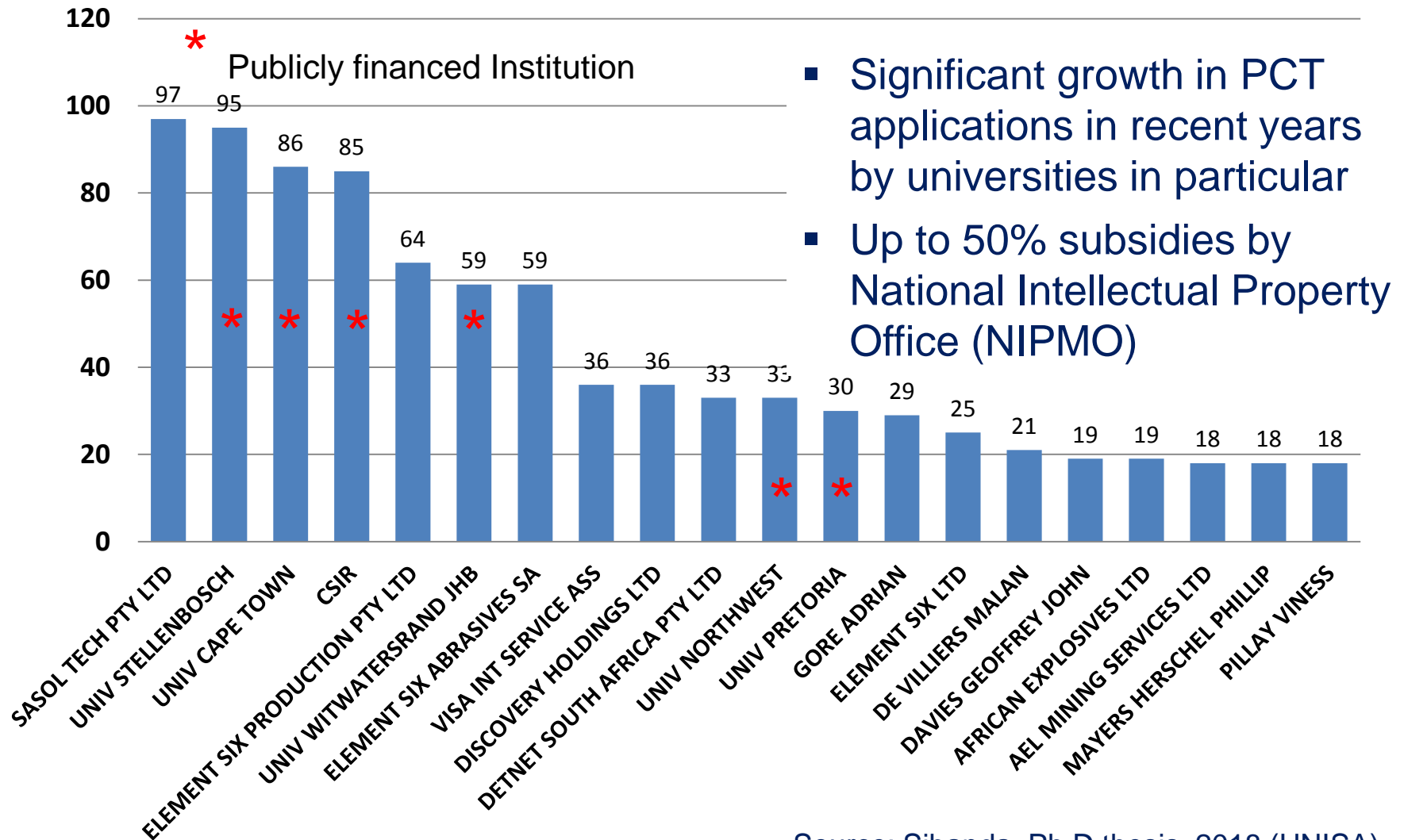
*Applications filed in period 1996-2005 (ZA Inventor Address)*



Source: Sibanda, Ph.D thesis, 2018 (UNISA)

# PCT Applications by South Africans

*Applications filed in period 2006-2015 (ZA Inventor Address)*

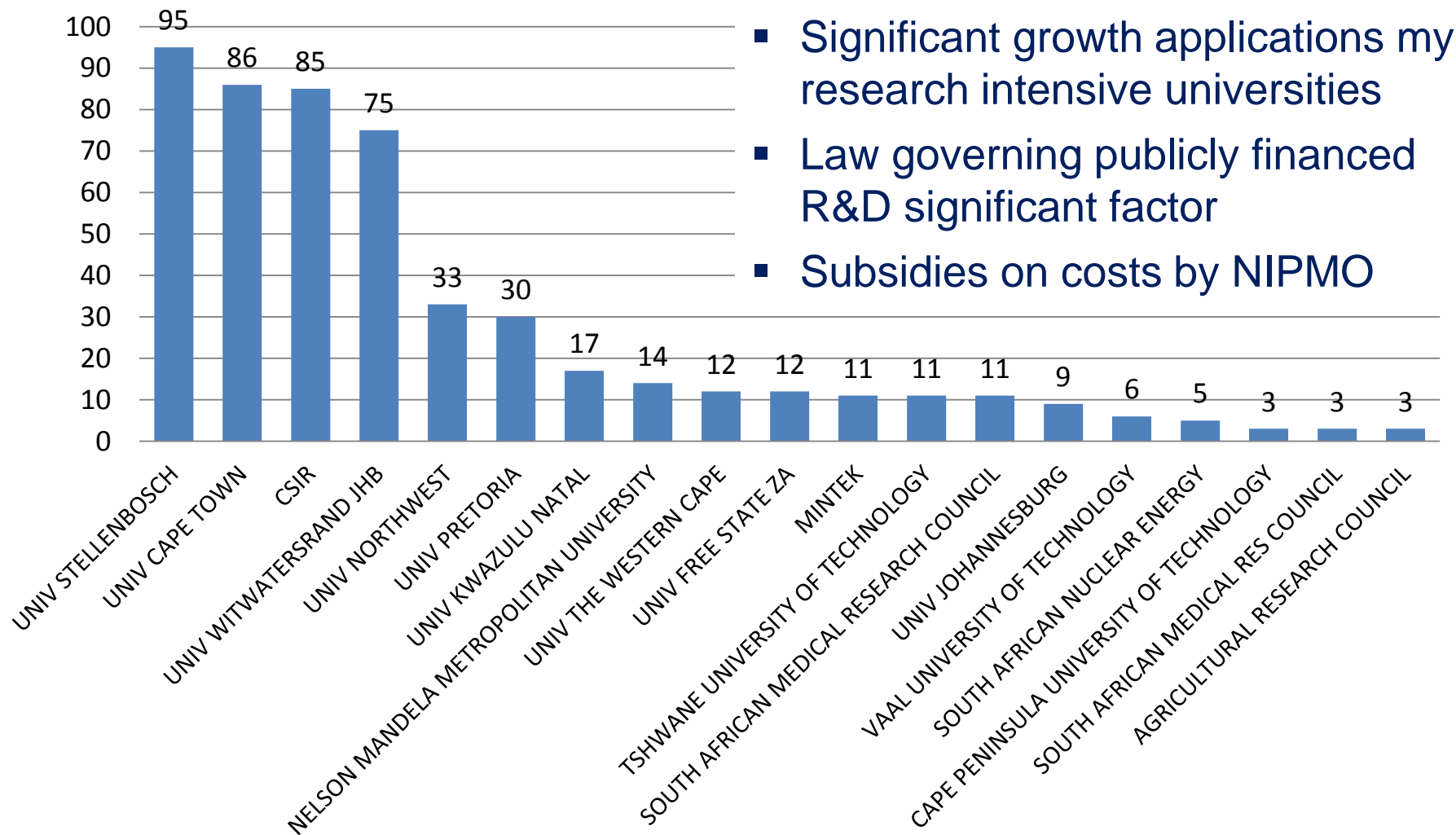


- Significant growth in PCT applications in recent years by universities in particular
- Up to 50% subsidies by National Intellectual Property Office (NIPMO)

Source: Sibanda, Ph.D thesis, 2018 (UNISA)

# PCT Applications by South Africa Public Institutions

*Applications filed in period 2006-2015 (ZA Inventor Address)*

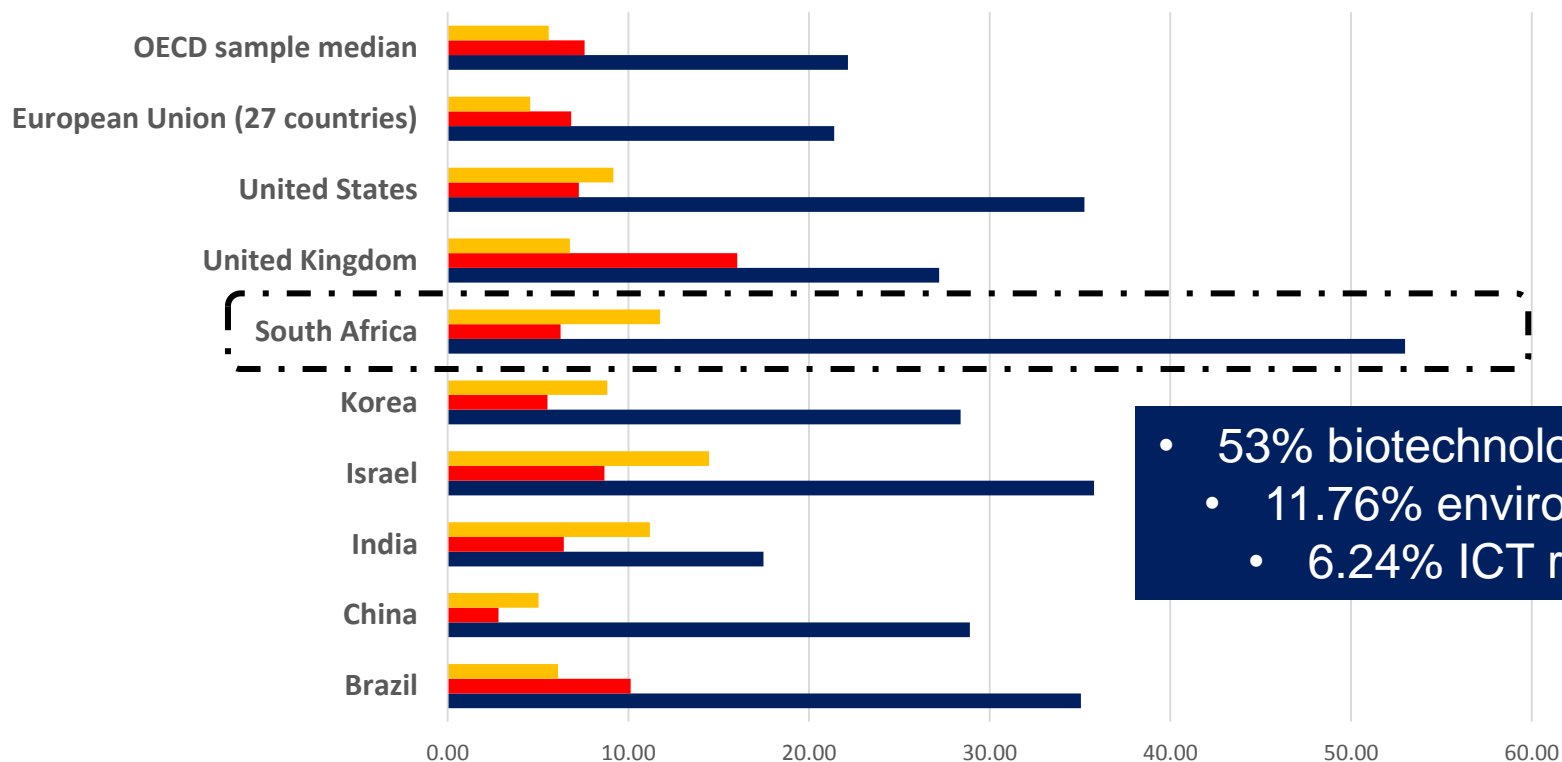


Source: Sibanda, Ph.D thesis, 2018 (UNISA)

# PCT Applications by South Africa Public Institutions

## Top Technology Fields of PCT Applications

Share of PCT patent applications filed by universities and PRIs



- 53% biotechnology related
- 11.76% environmental
- 6.24% ICT related

■ Environment-related technologies ■ Information and communication technologies ■ Bio- and nano-technologies

Source: <https://stats.oecd.org/>

# **Perceptions of PCT System by South Africa Publicly Financed Institutions**

# PCT Applications in South African Public Institutions

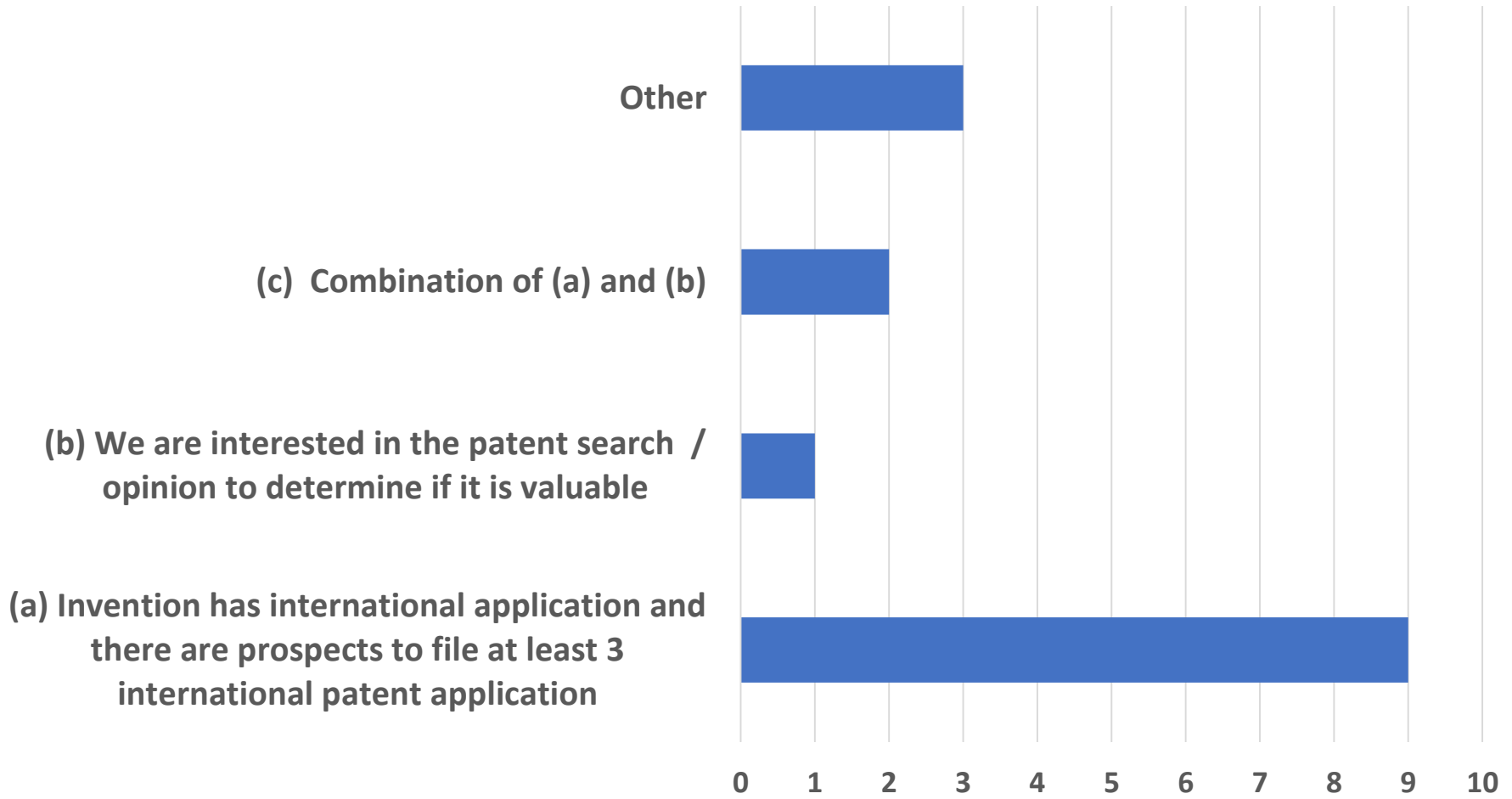
## *Survey to Publicly Financed Institutions (June 2018)*

<b>1. Reasons for your institution filing PCT Applications</b>	a) Invention has international application and there are prospects to file at least 3 international patent applications
	a) We are interested in the patent search / opinion to determine if it is valuable
	a) Other (Please state)
<b>2. Is cost relevant in the decision to file a PCT Application</b>	a) Yes
	a) No
<b>3. The decision regarding the International Search Authority is determined by</b>	a) Cost
	a) Quality of the search report
	a) Language of the prior art
	a) Other (Please state)
<b>4. If you were to influence the costs of the PCT application, which aspects would you ask for discount</b>	a) Filing costs
	a) Search and examination costs
	a) Combination of (a) and (b)
<b>5. Is the PCT system useful for universities and Science Councils?</b>	a) Yes
	a) No
<b>6. Any other information</b>	
THANK YOU SO MUCH	



# PCT Applications by South African Public Institutions

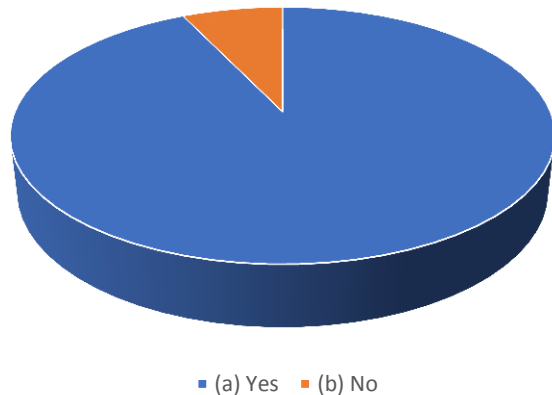
## *Reasons South African Institutions File a PCT Application*



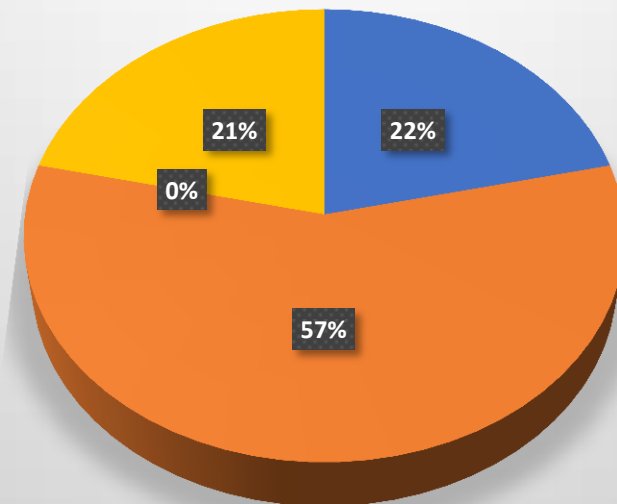
# PCT Applications by South Africa Public Institutions

## *Usefulness of PCT and Selection of ISA*

Is the PCT System Useful for Public Institutions



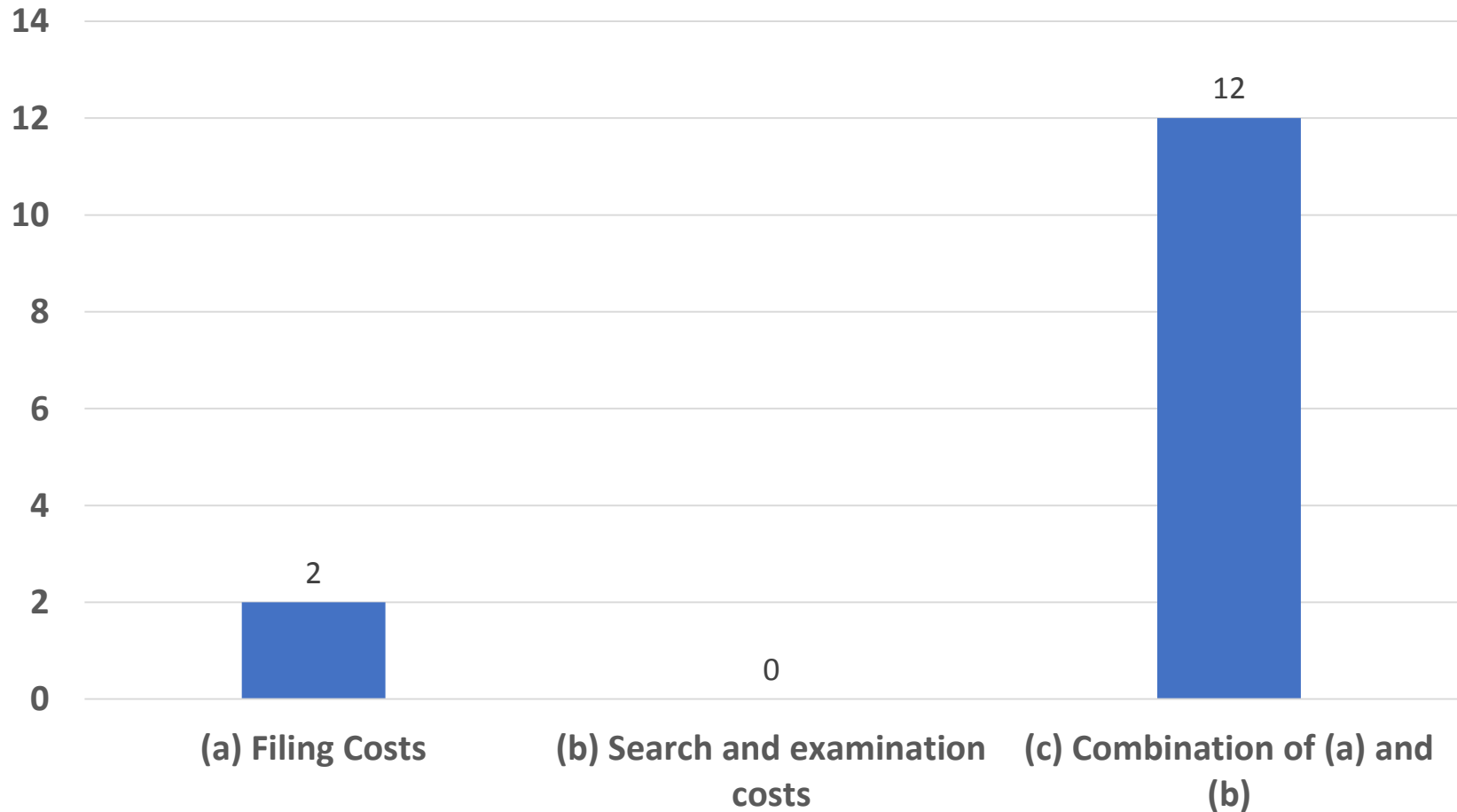
Factors Determining Selection of International Search Authority (ISA)



- (a) Cost
- (b) Quality of the search report
- (c) Language of the prior art
- Other

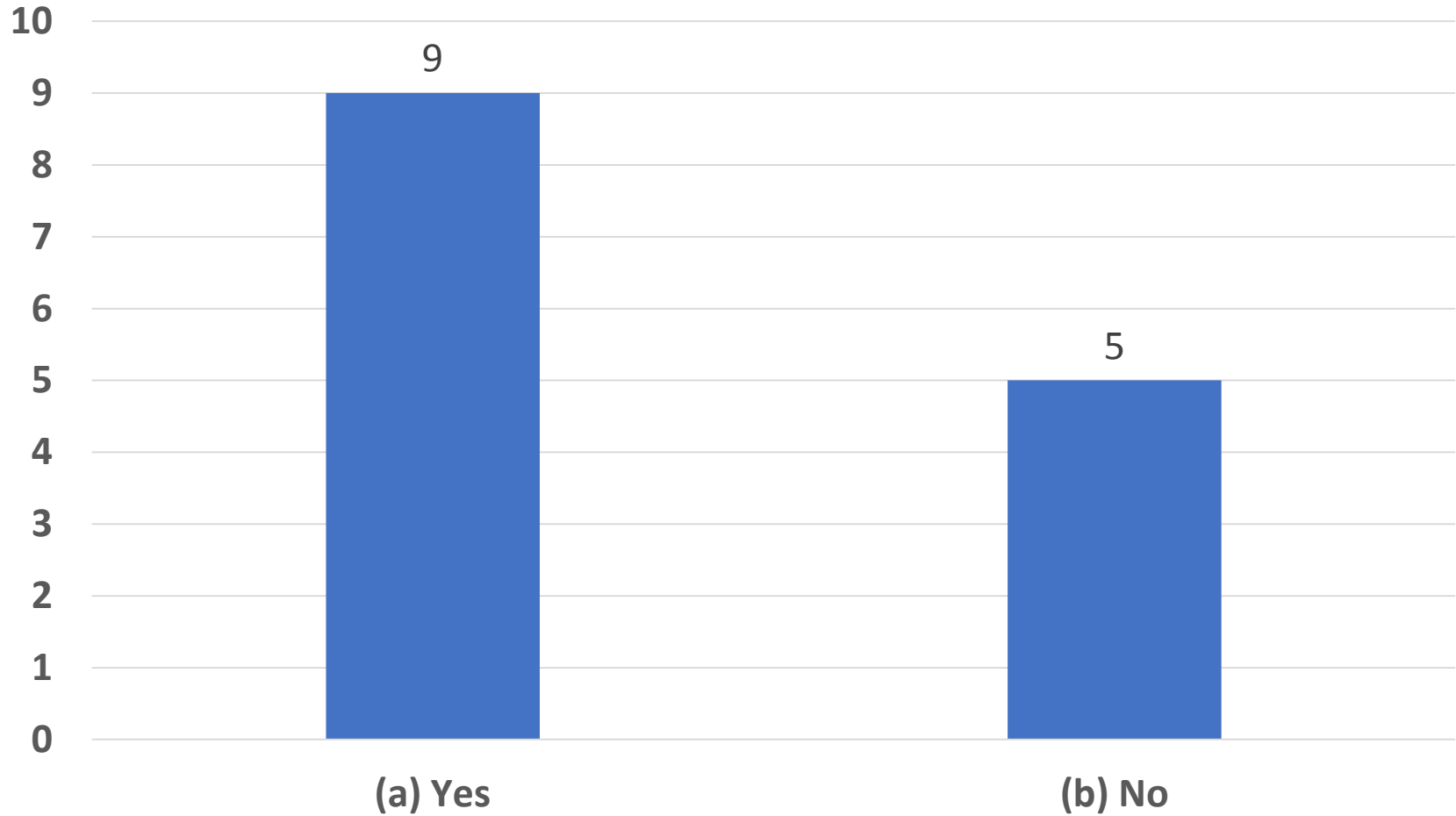
# PCT Applications by South Africa Public Institutions

*Aspects of Costs Institutions Wish to be Discounted*



# PCT Applications by South Africa Public Institutions

## *Role of Costs in Determining Filing of PCT Application*



# Concluding Remarks

- ❑ South Africa a significant contributor to global knowledge production
- ❑ Potential for increased PCT Applications
- ❑ Demonstrated perception of value offered by PCT System
- ❑ Significant increases in PCT applications by publicly financed institutions (esp. universities)
- ❑ Cost a factor – Subsidies by South African Government (NIPMO)
- ❑ Reduction in subsidies will impact filings
- ❑ Differentiated Fee Reduction - potential areas of economic competitiveness / research intensity / sectors to be stimulated

# Thank You

