



'Case studies on cooperation and exchange between R&D institutions in developed and developing countries'

Peer review

World Intellectual Property Organization
Committee on Development and
Intellectual Property (CDIP)
Geneva, February 17, 2015

Nikolaus Thumm

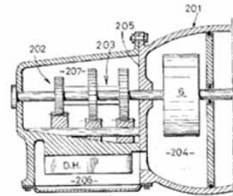
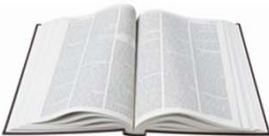



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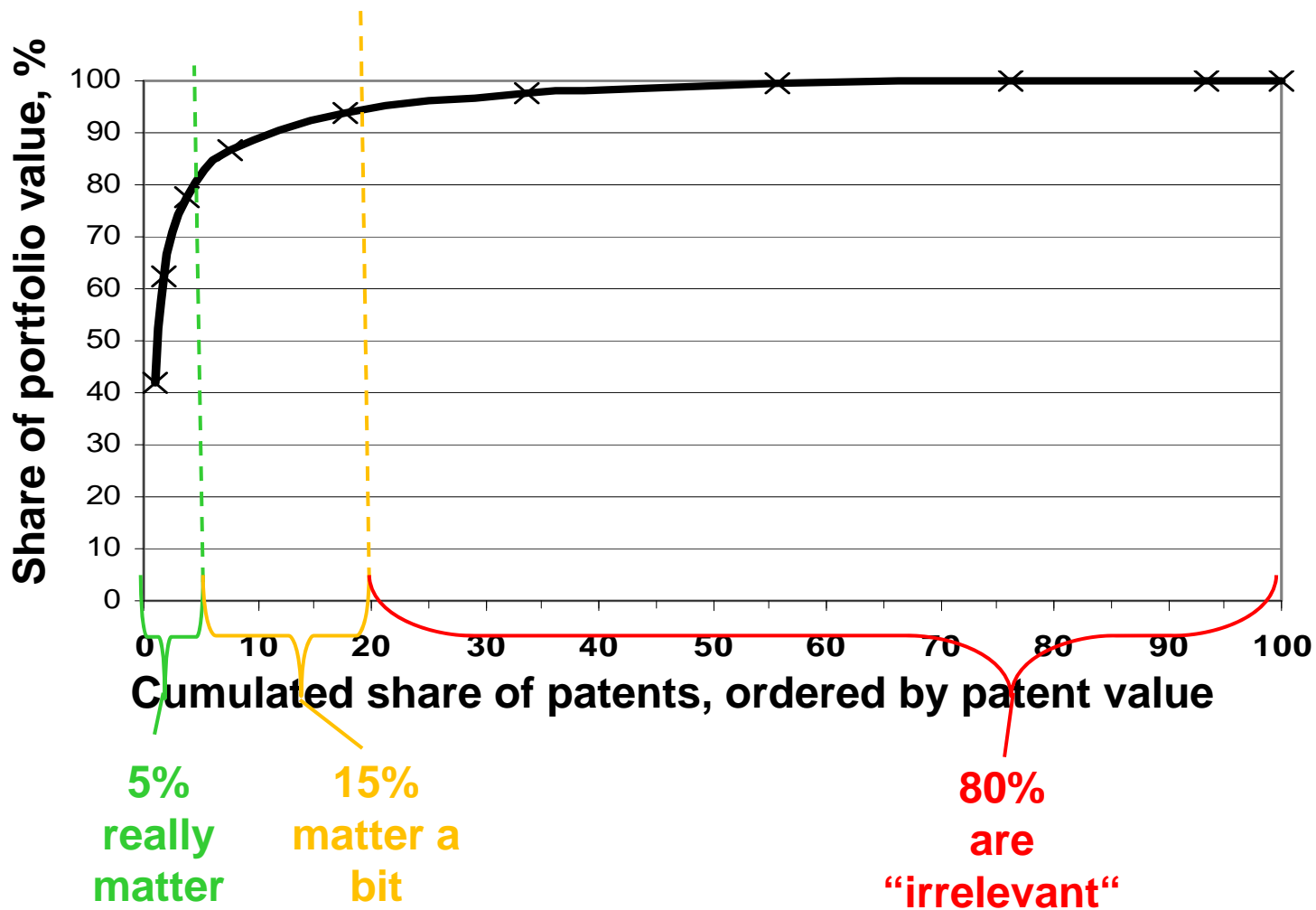
Seville/Spain

27 February 2015

Overview of intellectual property

Legal right	What for?	How?	
Patents	New inventions	Application and examination	
Copyright	Original creative or artistic forms	Exists automatically	
Trade marks	Distinctive identification of products or services	Use and/or registration	
Registered designs	External appearance	Registration*	
Trade secrets	Valuable information not known to the public	Reasonable efforts to keep secret	

The value of patents



27 February 2015

Data for about 7000 EP-patents. Source: European research project 'PATVAL'.

Patent data – knowledge – know how

The eight main IPC and ECLA sections	
A	Human necessities
B	Performing operations; transporting
C	Chemistry; metallurgy
D	Textiles; paper
E	Fixed constructions
F	Mechanical engineering; lighting; heating; weapons; blasting engines or pumps
G	Physics
H	Electricity

IPC: approx 70.000 codes; ECLA: approx 138.000 codes

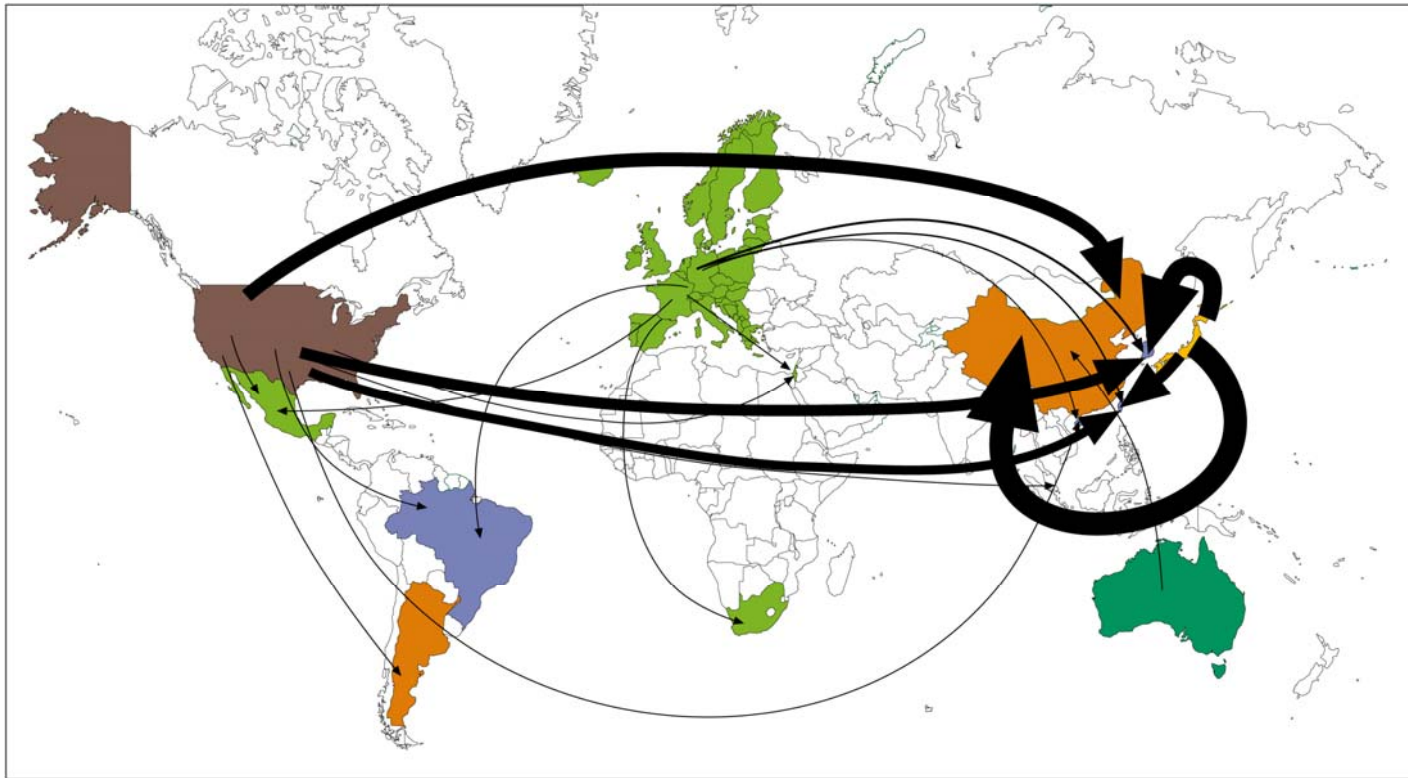
Patent data – knowledge – know how

New Classification Scheme YO2: Example Wind Energy

Hierarchy level Description

●	Wind energy
● ●	Wind turbines with rotation axis in wind direction
● ● ●	Blades or rotors
● ● ●	Components or gearbox
● ● ●	Control of turbines
● ● ●	Generator or configuration
● ● ●	Nacelles
● ● ●	Offshore towers
● ● ●	Onshore towers
● ● ●	Electrical/electronic aspects
● ● ● ●	Power interface
● ● ● ●	Power management
● ●	Wind turbines with rotation axis perpendicular to the wind direction

Example: patenting trends solar photo voltaic technologies (EPO 2011)



Source: OECD

Patenting between source country (“inventor country”) and countries in which IP protection is sought.

Example Africa (EPO 2013)

Africa has **vast untapped potential** for clean energy technologies

Patenting activity

- less than 1% of CET patents filed in Africa
- focus on climate mitigation technologies (much less adaptation technologies)
- inventive activity dominated by South Africa
- foreign patenting mainly: OECD Countries (D, USA, F, UK ...), almost no BRIC

Rate of growth of patenting activity higher than world average

Rate of co-invention much higher than in the rest of the world

Little evidence of intra African co-invention and cross border patenting



THANK YOU FOR YOUR ATTENTION

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