



European IP Helpdesk

Stay ahead of the innovation game.

European IP Helpdesk
Patents and Innovation

13.05.2025





European IP Helpdesk

- Service initiative of the European Commission
- Addressing **current and potential beneficiaries of EU-funded projects, researchers and EU SMEs**
- Free-of-charge first-line support on intellectual property (IP)
- Hands-on IP and innovation management support
- International pool of IP experts from various thematic fields
- Unique cooperation scheme with the Enterprise Europe Network: 43 ambassadors from 26 EU countries



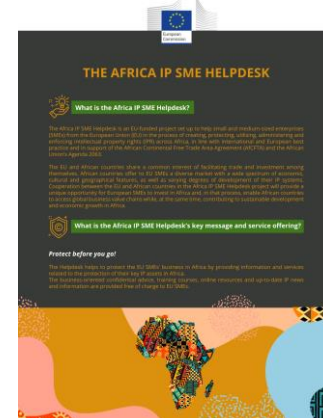
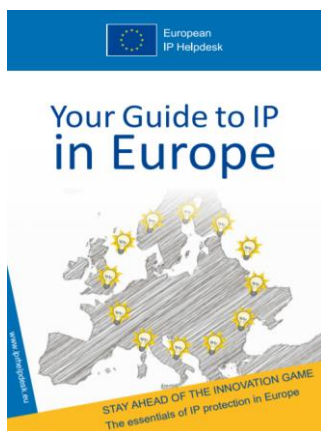


The EC IP Helpdesks





EC IP (SME) Helpdesk Hub – Gateway to Information



- E-learning modules & more
- Guides / Topic, country, sector-specific factsheets / Infographics
- Case studies



Upcoming events



Europa - Upcoming events

06
MAY
2025

Training and workshops

[EU - Webinar: IP Commercialisation & Licensing - Advanced](#)

Live streaming available

13
MAY
2025

Training and workshops

[EU - Webinar: Patents and Innovation](#)

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[EU - Webinar: Freedom to Operate](#)

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[EU - Webinar: Finding Patents](#)

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[EU - Webinar: Maximizing the Impact of Horizon 2020 project results](#)

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[EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - MedTech](#)

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[EU - Webinar & Horizon Results Platform: Publishing Vs Patenting](#)

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Thank you!

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- training@iprhelpdesk.eu
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- LinkedIn [/european-ipr-helpdesk](#)
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About me



BSc Physical Chemistry (*Exon UK*)

PhD Neutron Science (*Exon UK*)

Harwell (UK), Rutherford Appleton (UK), ILL Grenoble (FR)

Royal Society of Chemistry, Institute of Physics,
Science Council (UK)

HM Govt, X-ray, electron, laser beam microanalysis

Looooooooooooooooong time at European Patent Office (NL, AT)

Patent examiner (electron and ion optics) IT manager,internet
services manager, research manager

Consultant; bring worlds of STEMM and IP together WIPO EUIPO EPO

Cambridge University Technology Management Teaching and Research

Visiting Fellow



Roadmap

- **IP basics**
- Patent basics
- Patent information basics
- Invention vs innovation
- Patent information and innovation
 - Your innovation, and others' innovation





1 500 to 2 000
patents

Displays, semiconductor
circuits, sensors, etc.

Registered
design

Shape of phone

Registered trade
marks

Brand name, start-up tone

Copyright

Software, ringtones and
images

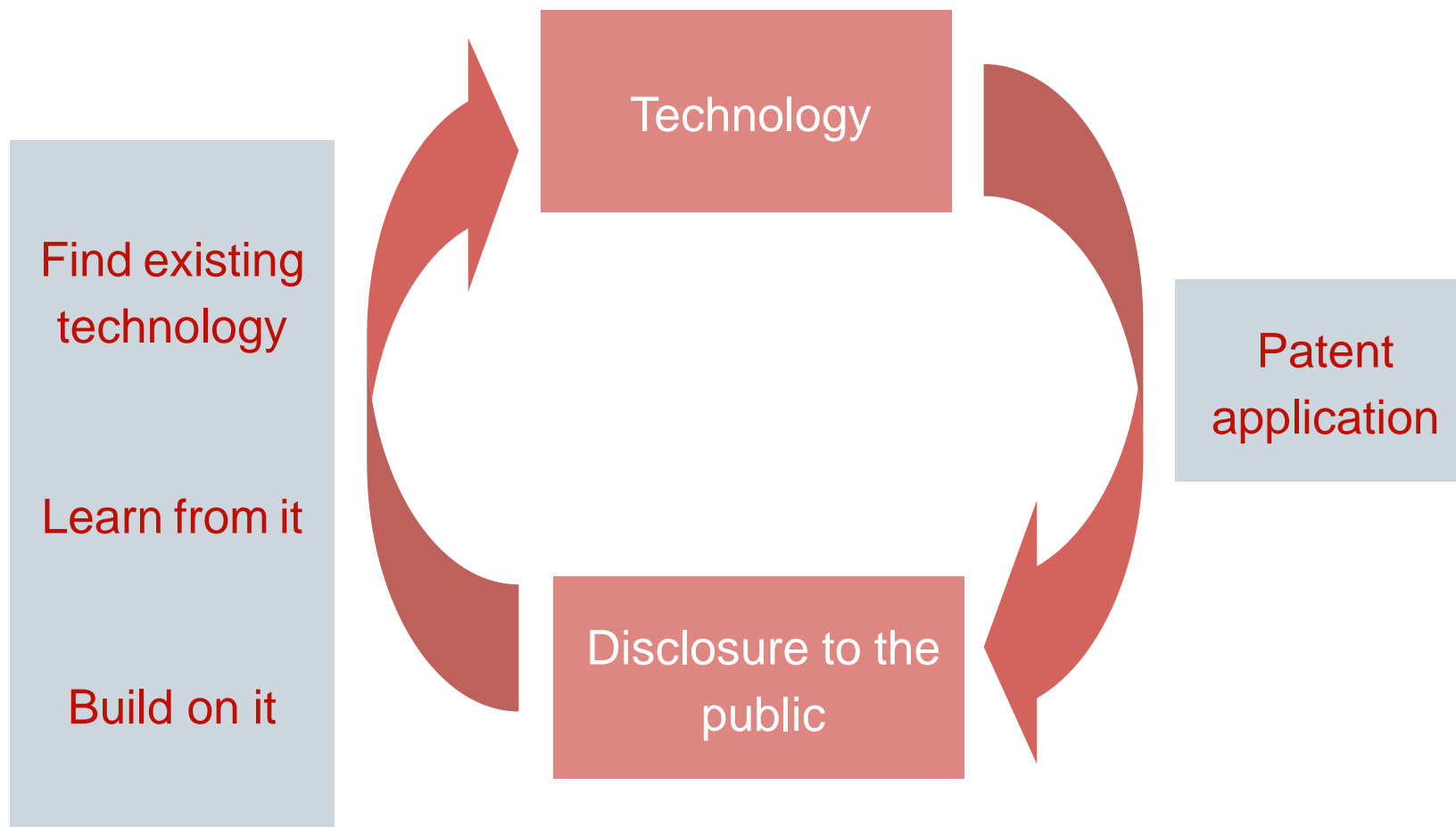


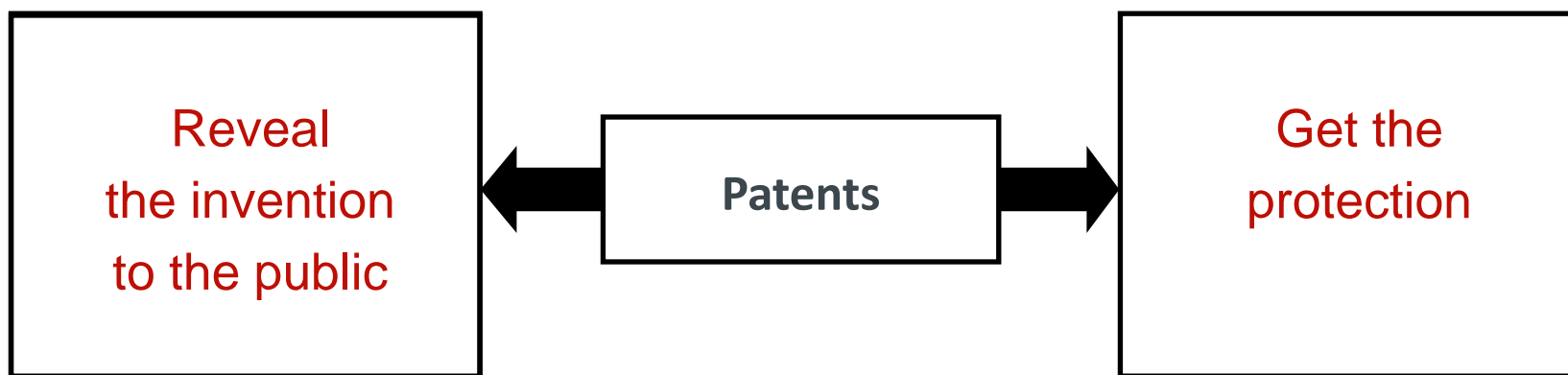
Roadmap

- IP basics
- **Patent basics**
- Patent information basics
- Invention vs innovation
- Patent information and innovation











Patentability

Patents are granted for inventions in all fields of technology

To be patentable, inventions must

- be **new**
- involve an **inventive step**
- be **industrially applicable**

They must relate to a product, process, apparatus or use.



Patentability - new

- Novel
- Never been seen in public (print, media, conference....)
- Patent first, then publish



Patentability – inventive step

- Not obvious
- Expert in the field
- Would look - not could look
- Thinking outside the box



Patentability – industrially applicable

- Industry
- Agriculture
- Education
- Medicine
- Technical consumer goods, products, services
- B2C
- B2B



Patentability

- Product
- Process
- Apparatus
- Use

Allowable in one patent application but only one single inventive concept



Excluded

Discoveries, Scientific theories

Mathematical methods, Computer programs

Aesthetic creations, Business methods

Methods for playing games

Methods for performing mental acts

Presentations of information

If
claimed
"as such"



Exemptions

- Plant or animal varieties
- Inventions whose commercial exploitation would be contrary to "ordre public" or morality (e.g. processes for cloning of human beings)
- Methods for treatment of the human or animal body by surgery or therapy and diagnostic methods



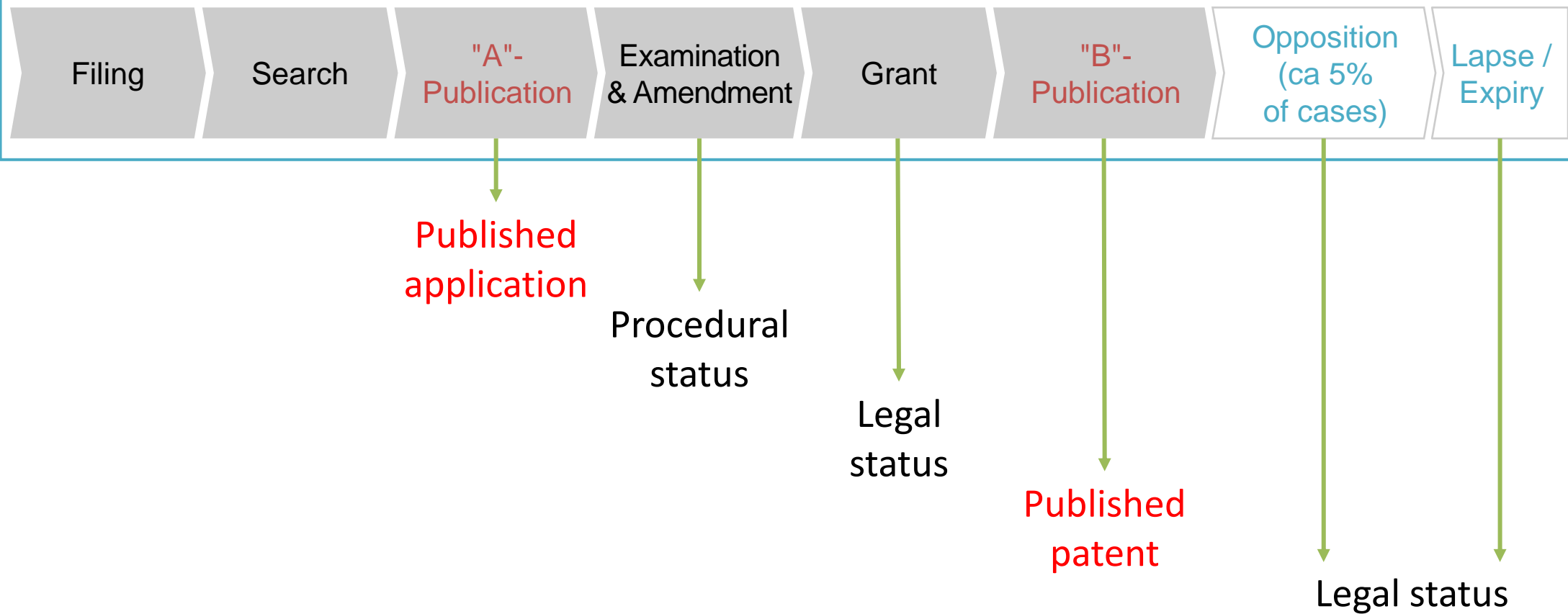
Roadmap

- IP basics
- Patent basics
- **Patent information basics**
- Invention vs innovation
- Patent information and innovation





Patent granting process



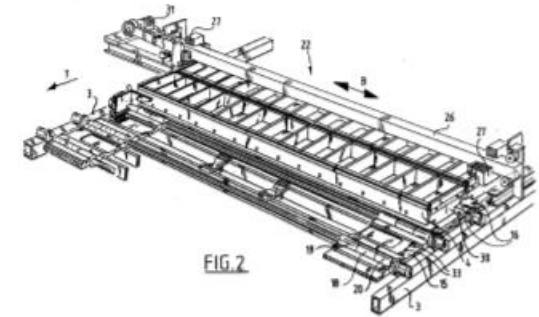






Structure of Patent Documents

- Front Page
- Bibliographic Data
- Title
- Abstract
- Description
- Drawings
- Claims


(19)	 Europäisches Patentamt European Patent Office Office européen des brevets	(11)	 EP 1 000 000 A1
(12) EUROPEAN PATENT APPLICATION			
(43)	Date of publication: 17.05.2000 Bulletin 2000/20	(51)	Int. Cl. ⁷ : B28B 5/02 , B28B 7/00, B28B 1/29
(21)	Application number: 99203729.1		
(22)	Date of filing: 08.11.1999		
(84)	Designated Contracting States: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE Designated Extension States: AL LT LV MK RO SI	(72)	Inventor: Kosman, Wilhelmus Jacobus Maria 6562 DA Groesbeek (NL)
(30)	Priority: 12.11.1998 NL 1010536	(74)	Representative: Schumann, Bernard Herman Johan et al Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1 2517 GK Den Haag (NL)
(71)	Applicant: Beheermaatschappij De Boer Nijmegen B.V. 6541 BS Nijmegen (NL)		
(54) Apparatus for manufacturing green bricks for the brick manufacturing industry			
(57) The invention relates to an apparatus (1) for manufacturing green bricks from clay for the brick manufacturing industry, comprising a circulating conveyor (3) carrying mould containers combined to mould container parts (4), a reservoir (5) for clay arranged above the mould containers, means for carrying clay out of the reservoir (5) into the mould containers, means (9) for pressing and trimming clay in the mould containers, means (11) for supplying and placing take-off plates for the green bricks (13) and means for discharging green bricks released from the mould containers, characterized in that the apparatus further comprises means (22) for moving the mould container parts (4) filled with green bricks such that a protruding edge is formed on at least one side of the green bricks.			
			
EP 1 000 000 A1			
Printed by Xerox (UK) Business Services 016 7 04023-6			



Front Page


- Dates
- Priority, application, publication nos.
- IPO ID
- Inventors
- Applicants
- Representatives
- Titles
- Classification

- Abstracts
- Image (if available)



(19)

Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 000 000 A1

(12)

EUROPEAN PATENT APPLICATION

(43)

Date of publication:
17.05.2000 Bulletin 2000/20

(51)

Int. Cl.⁷: B28B 5/02, B28B 7/00,
B28B 1/29

(21)

Application number: 99203729.1

(22)

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<div>(84)</div> <div>Designated Contracting States: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE Designated Extension States: AL LT LV MK RO SI</div>	<div>(72)</div> <div>Inventor: Kosman, Wilhelmus Jacobus Maria 6562 DA Groesbeek (NL)</div> <div>(74)</div> <div>Representative: Schumann, Bernard Herman Johan et al Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1 2517 GK Den Haag (NL)</div>
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Priority: 12.11.1998 NL 1010536

(71)

Applicant:
Beheermaatschappij De Boer Nijmegen B.V.
6541 BS Nijmegen (NL)

(54)

Apparatus for manufacturing green bricks for the brick manufacturing industry

(57)

The invention relates to an apparatus (1) for manufacturing green bricks from clay for the brick manufacturing industry, comprising a circulating conveyor (3) carrying mould containers combined to mould container parts (4), a reservoir (5) for clay arranged above the mould containers, means for carrying clay out of the reservoir (5) into the mould containers, means (9) for pressing and trimming clay in the mould containers, means (11) for supplying and placing take-off plates for the green bricks (13) and means for discharging green bricks released from the mould containers, characterized in that the apparatus further comprises means (22) for moving the mould container parts (4) filled with green bricks such that a protruding edge is formed on at least one side of the green bricks.

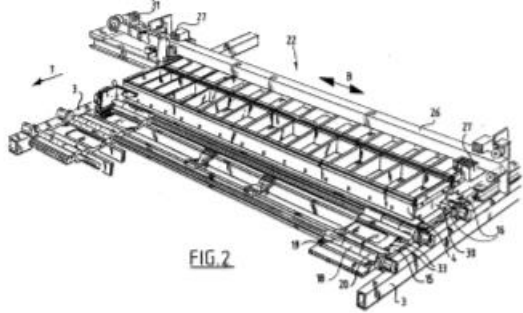


FIG. 2

EP 1 000 000 A1

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Description

Enabling disclosure

Rigorous

Language sometimes
difficult

Text, keywords,
synonyms

1	EP 1 000 000 A1	2
Description		
<p>[0001] The invention relates to an apparatus for manufacturing green bricks from clay for the brick manufacturing industry, comprising a circulating conveyor</p>		during operation at the location of the side walls of the mould container part. An exceptionally compact embodiment of the invention is hereby realized which utilizes the available space economically and can be arranged without difficulty on the known apparatus.
<p>carrying mould containers combined to mould container parts, a reservoir for clay arranged above the mould containers, means for carrying clay out of the reservoir into the mould containers, means for pressing and trimming clay in the mould containers, means for supplying and placing take-off plates for the green bricks and means for discharging green bricks released from the mould containers. Such an apparatus is known in the field and is for instance described in the patent 1000186 of applicant. The known apparatus is extremely suitable for automated production of large numbers of green bricks for the brick manufacturing industry. The bricks fired from these green bricks have a substantially smooth, uniform appearance.</p>		<p>[0010] In order to prevent unnecessary damage to the mould container parts, these latter are provided on their side walls with stop surfaces, preferably of plastic. In preference the stop members of the frame of the edge-forming means are also provided with these, preferably plastic, stop surfaces.</p>
<p>[0002] A recent demand has developed on the market for bricks which appear as if they have been manufactured according to traditional methods.</p>		<p>[0011] The invention is described in more detail hereinbelow with reference to the drawing in which:</p>
<p>[0003] The invention has for its object to adapt the known apparatus such that it can produce in automated manner large numbers of green bricks with a traditional appearance.</p>		<p>figure 1 shows schematically a preferred embodiment of the apparatus according to the invention; figure 2 shows in more detail a perspective view of a part of the apparatus of figure 1 with the edge-forming means therein; figure 3 shows the edge-forming means of figure 2 in even more detail; figure 4 is a perspective view of a first preferred embodiment of a mould container part which is suitable for use in the apparatus according to the invention; figure 5 is a perspective view of a second preferred embodiment of a mould container part; and figure 6 shows schematically a part of a wall which has been built using bricks provided with an edge and fired from the green bricks manufactured using the apparatus according to the invention.</p>
<p>[0004] For this purpose the apparatus according to the invention has the feature that the apparatus further comprises means for moving the mould container parts filled with green bricks such that a protruding edge is formed on at least one side of the green bricks.</p>		<p>[0012] Like components are provided in the figures with like reference numerals.</p>
<p>[0005] The bricks fired from the green bricks produced using the apparatus according to the invention impart beautiful shadow effects to the wall into which they have been built when the sun shines thereon. This aesthetic effect is an important commercial advantage.</p>		<p>[0013] Figure 1 shows a preferred embodiment of an apparatus for manufacturing green bricks for the brick manufacturing industry according to the invention. Apparatus 1 comprises a conveyor 3. Mould containers combined to a unit are placed in the form of a mould container part 4 on the conveyor. The mould container parts fit closely against each other. Placed above the mould containers is a reservoir 5 for clay which is kept in continuous movement by an agitator 6 which is driven by the electric motor 7. Clay is supplied to reservoir 5 by a circulating conveyor 8. The clay is carried out of reservoir 5 into the mould containers and then pressed down by pressing device 9 which is pivotable on shaft 10. The excess clay is also trimmed using means which are not drawn. The device 11 carries take-off plates 12 onto a mould container part such that, after turning over of the mould container part, the green bricks 13 come to lie on the plates after being released from the mould containers.</p>
<p>[0006] The edge-forming means are preferably adapted to move the mould container parts repeatedly for a certain period. Repetition a number of times, for instance three times, is found in practice to be sufficient to obtain the intended effect.</p>		<p>[0014] Edge-forming means 22 are arranged between device 9 and device 11. The edge-forming means move each mould container part 4 such that a protruding edge forms on the upper side of the green bricks received therein.</p>
<p>[0007] In a practical preferred embodiment the edge-forming means are adapted to move the mould container parts substantially transversely of the transporting direction.</p>		
<p>[0008] In a further preferred embodiment the edge-forming means comprise a frame which is adapted to engage individually on a mould container part. This preferred embodiment has the significant advantage that the edge-forming means can act on one mould container part while another mould container part undergoes another operation and is for instance filled with clay. The edge-forming means can therefore be added to the known apparatus without this affecting the production time.</p>		
<p>[0009] In yet another preferred embodiment the frame spans the mould container part and is provided on both sides with stop members which are situated</p>		



Claims

Claimed scope of protection
(as filed)

Independent and dependent
claims

Product, process, apparatus,
use

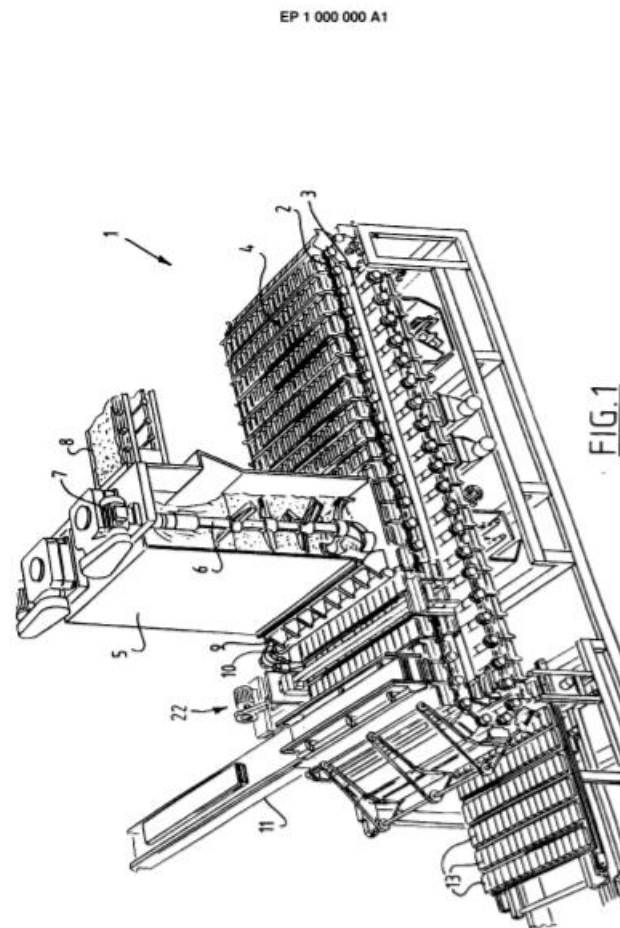
Text, synonyms

5	EP 1 000 000 A1	6
2.	Apparatus as claimed in claim 1, wherein the edge-forming means are adapted to move the mould container parts repeatedly for a certain period.	
3.	Apparatus as claimed in claim 1 or 2, wherein the edge-forming means are adapted to move the mould container parts substantially transversely of the transporting direction.	5
4.	Apparatus as claimed in any of the foregoing claims, wherein the edge-forming means comprise a frame which is adapted to engage individually on a mould container part.	10
5.	Apparatus as claimed in claim 4, wherein the frame spans the mould container part and is provided on both sides with stop members which are situated during operation at the location of the side walls of the mould container part.	15
6.	Apparatus as claimed in claim 5, wherein the stop members are provided with stop surfaces which preferably comprise plastic.	20
7.	Apparatus as claimed in claim 5 or 6, wherein the mould container parts are provided on their side walls with stop surfaces which preferably comprise plastic.	25
8.	Apparatus as claimed in claim 4, 5, 6 or 7, wherein the edge-forming means comprise an eccentric drive for the frame.	30
9.	Apparatus as claimed in any of the foregoing claims, wherein each mould container part is provided with a number of spacer members for supporting the take-off plates at a distance above the green bricks.	35
10.	Apparatus as claimed in any of the foregoing claims, wherein the mould container parts are fixed movably onto the conveyor with some clearance in the direction of movement.	40
11.	Apparatus as claimed in claim 10, wherein the conveyor is a chain conveyor and the mould container parts are coupled with some clearance in the direction of movement to a chain part connectable to the chain.	45
		50
		55
		4



Drawings

Worth a thousand words






Search Report

X – novelty

Y-Y - inventive step

A - general prior
art

EP 1 000 000 A1

 European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 20 3729

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (INCL.7)
A	EP 0 680 812 A (BOER BEHEER NIJMEGEN BV) DE) 8 November 1995 (1995-11-08) * the whole document *	1,10,11	B28B5/02 B28B7/00 B28B1/29
A	NL 9 400 663 A (BOER BEHEER NIJMEGEN BV) DE) 1 December 1995 (1995-12-01) * the whole document *	1,3	
A	DE 35 46 191 A (NETZSCH MASCHINENFABRIK) 2 July 1987 (1987-07-02) * the whole document *	1-3,8	
			TECHNICAL FIELD SEARCHED (INCL.7)
			B28B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 15 February 2000	Examiner Gourier, P
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : number of the same patent family, corresponding document			

11



Roadmap

- IP basics
- Patent basics
- Patent information basics
- **Invention vs innovation**
- Patent information and innovation





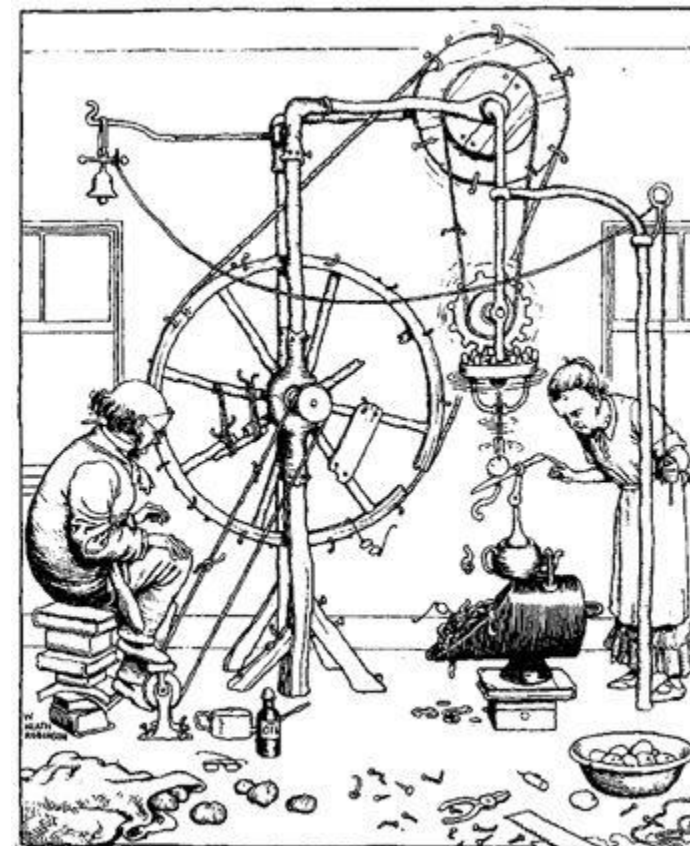
Invention – mouse kept alive for more than 90 years





Invention

- EPO – no definition of “invention”
- Except: “technical effect”
- Technical?

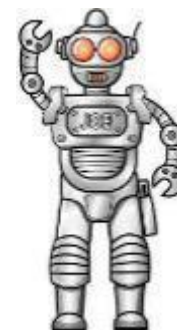


The Professor's invention for peeling potatoes.



Innovation

- Technical innovation
- A process
- From ideation to commercialisation





Innovation ≠ Invention



CREATIVITY

The act of turning
new and imaginative
ideas into reality.



INVENTION

Creation of a new
idea or concept



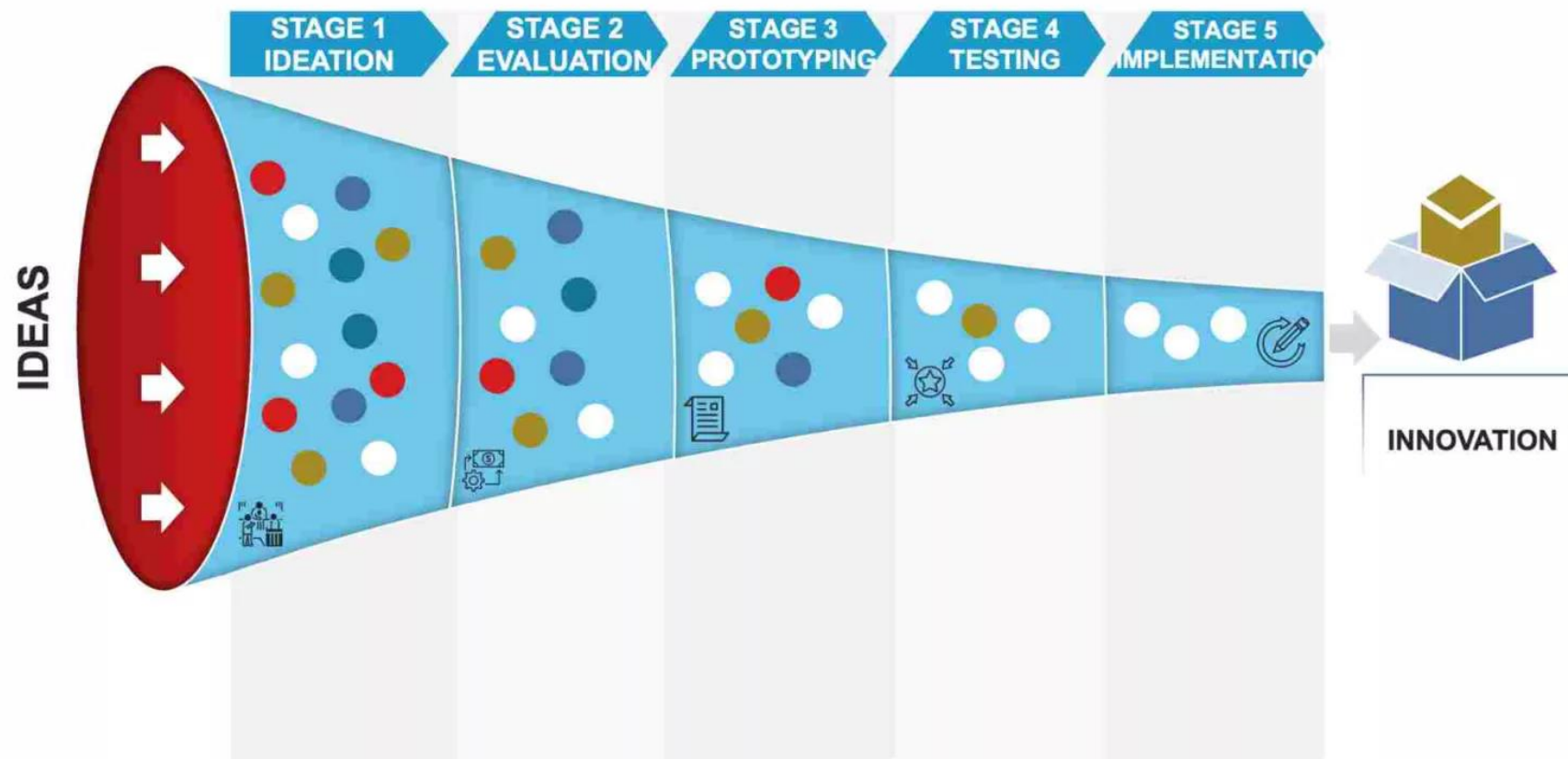
INNOVATION

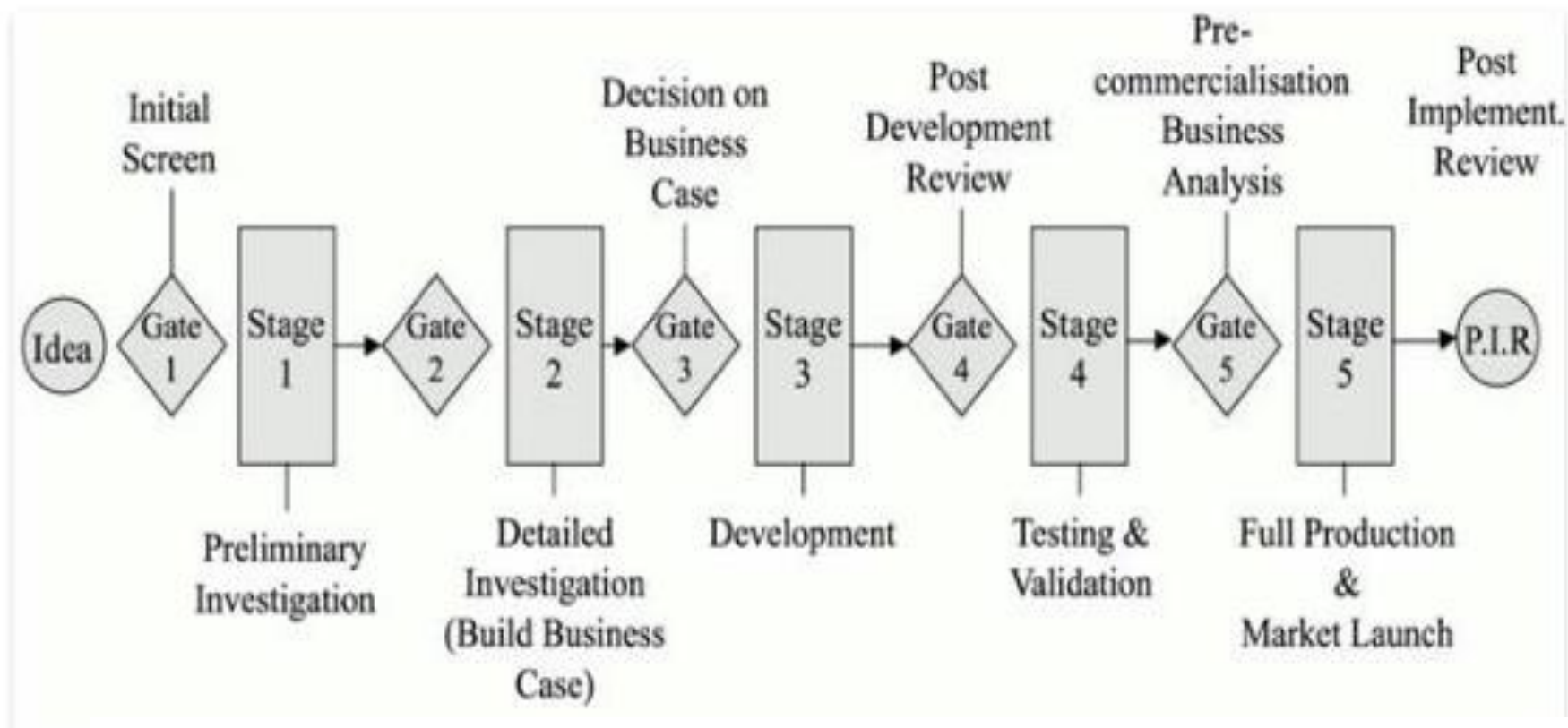
Turning a new
concept into
commercial success
or widespread use



YOUR







Cooper, Robert G. (1993). [*Winning at New Products: Accelerating the Process from Idea to Launch*](#) (2 ed.). Cambridge, Massachusetts: Basic Books. ISBN 978-0-201-56381-8.



Roadmap

- IP basics
- Patent basics
- Patent information basics
- Invention vs innovation
- **Patent information and innovation**





The role of patent information in innovation

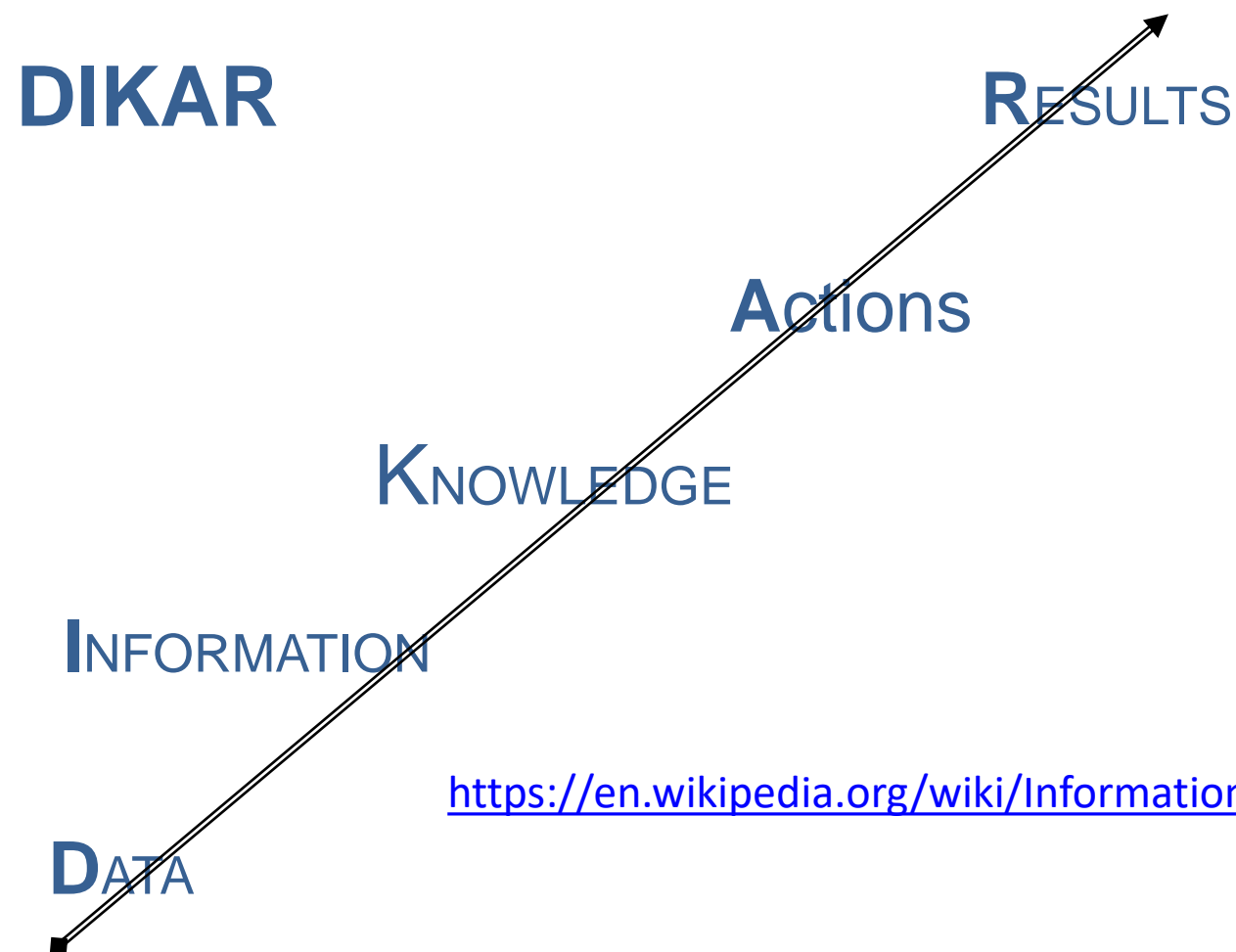
EPO 2017

[https://documents.epo.org/projects/babylon/eponet.nsf/0/F2E016B9DA1EC24AC125813D0056D720/\\$File/information_in_the_innovation_process_survey_results_en.pdf](https://documents.epo.org/projects/babylon/eponet.nsf/0/F2E016B9DA1EC24AC125813D0056D720/$File/information_in_the_innovation_process_survey_results_en.pdf)



Does patent information support innovation?





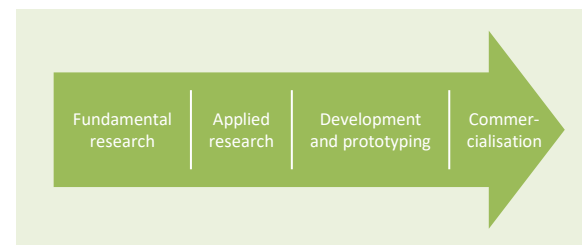
https://en.wikipedia.org/wiki/Information_management





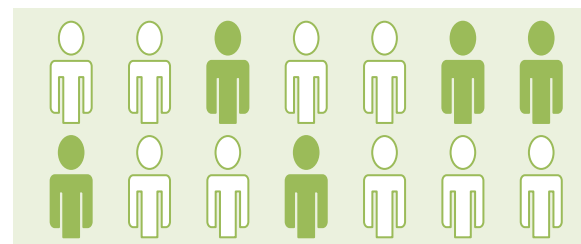
• Research

Model of the innovation process



Identify innovators

- Business / technology platforms
- **no** IP experts!



1. small group, qualitative answers
→ list of questions
2. larger group, quantitative evaluation

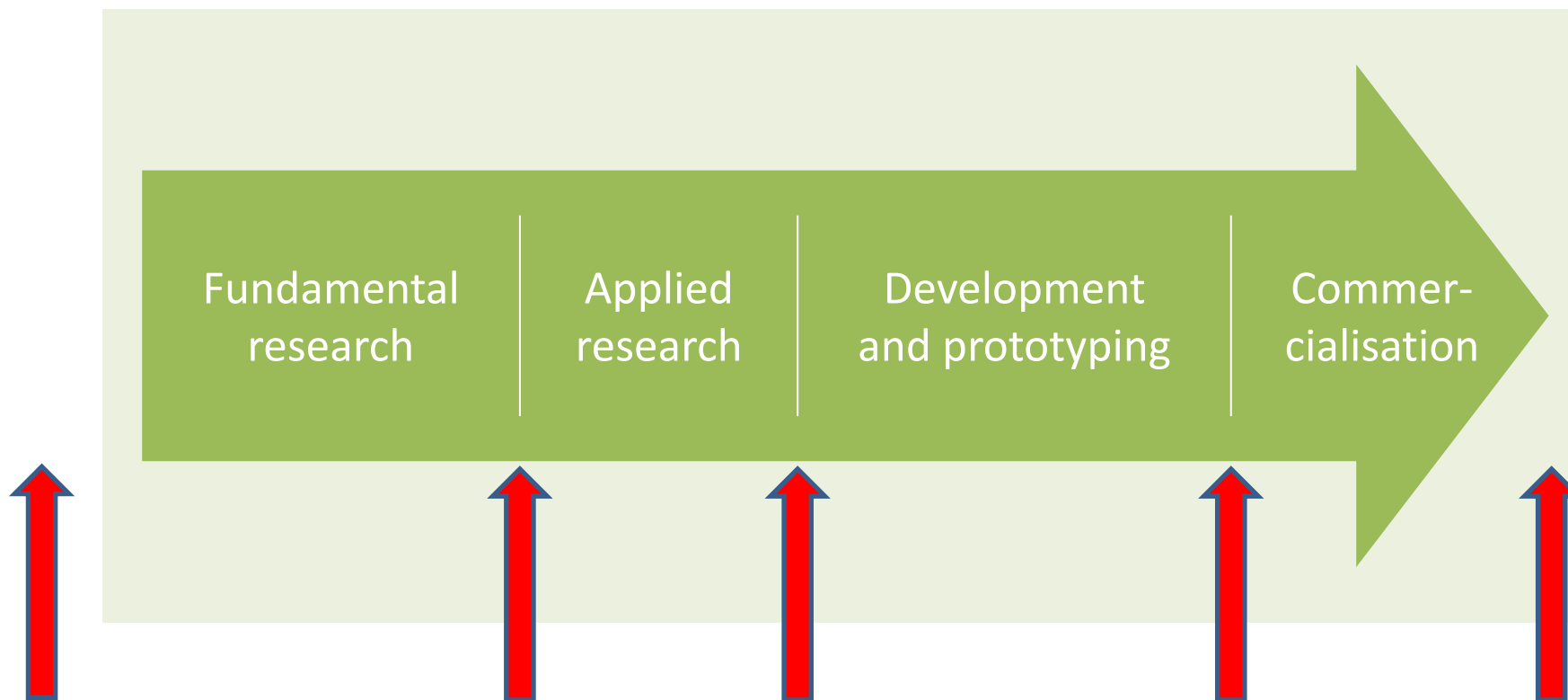


supported by market research experts





- The innovation process



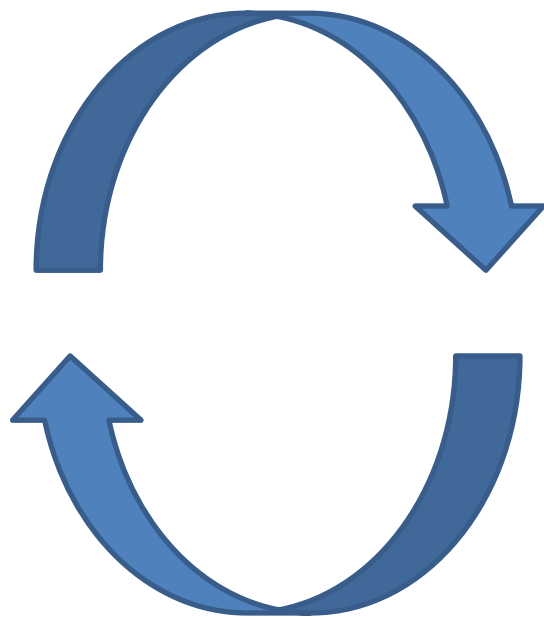


Linear – one off - process





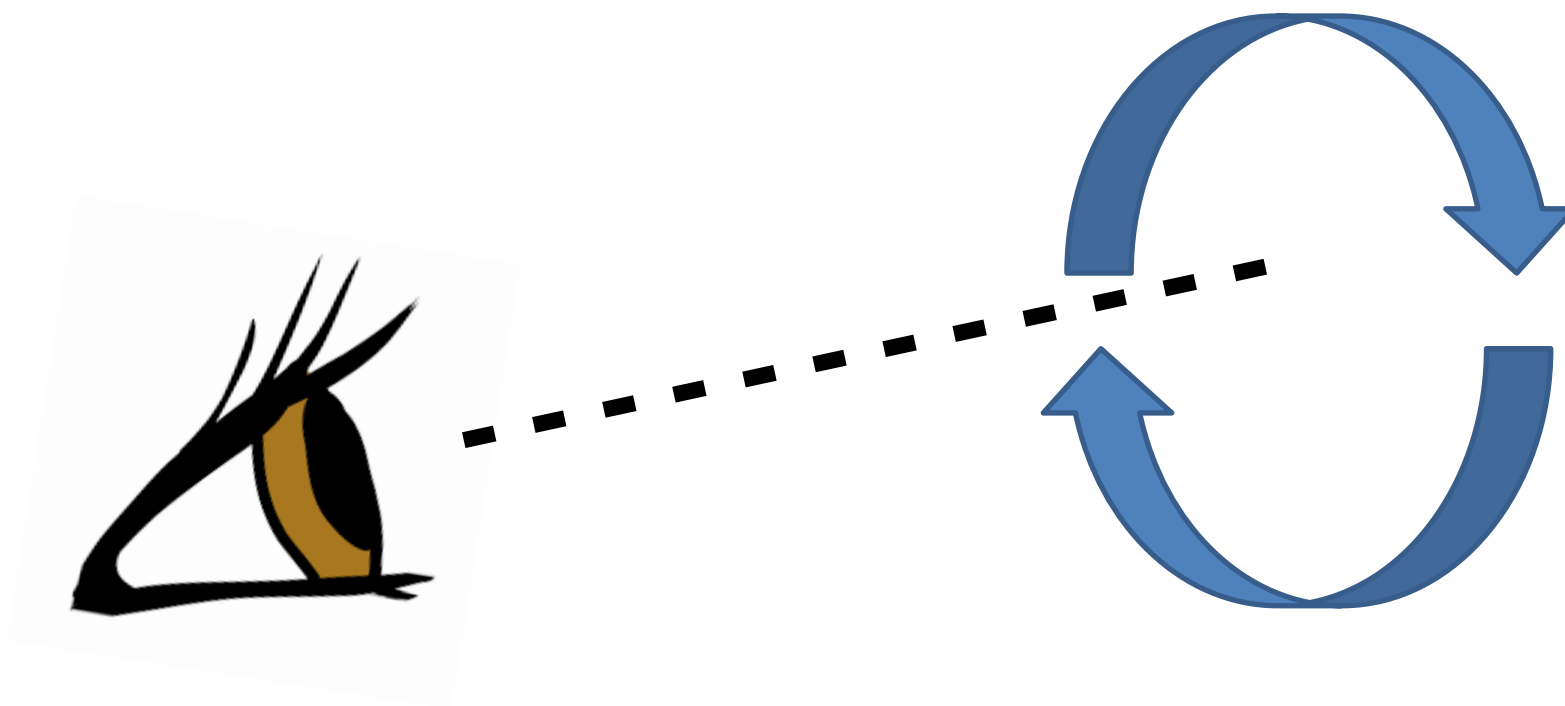
Innovation cycle – continued innovation



**The first rule of business is to stay
in business**

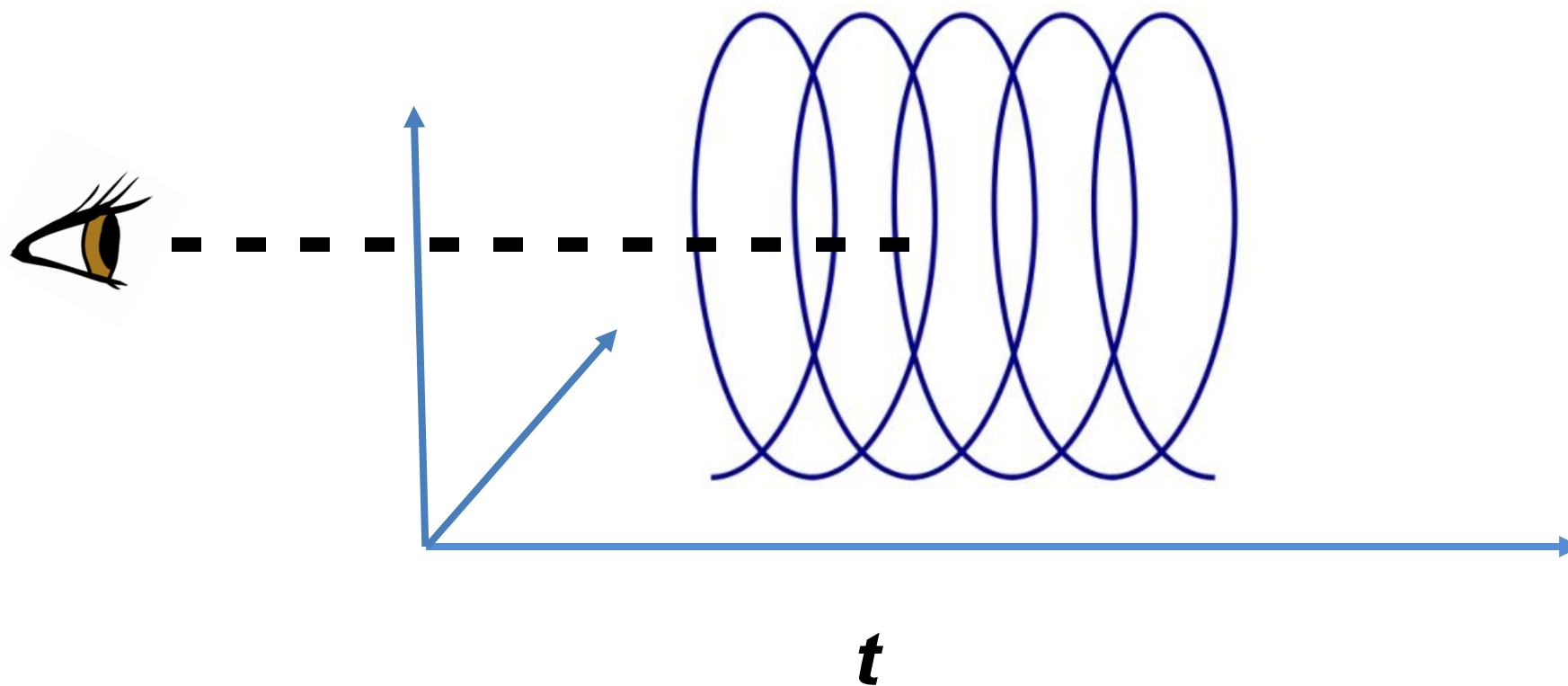


Innovation cycle – continued innovation





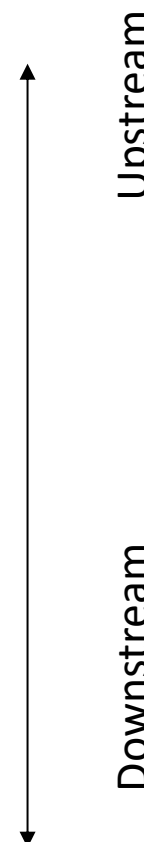
Helix





Applications of patent information

- Funding propositions
 - Bank Loans
 - Venture Capital
- Valuation
 - Intangible assets
- Licensing
- Technology Transfer
 - Disposal, trade outright sale
 - or assignment





- Prior art/state-of-the art
- Novelty/patentability
- Technology watch/competitive intelligence
- Legal status
- Freedom to act

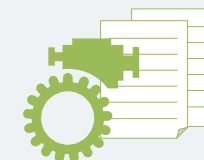


• Why patent information matters in innovation

- Avoid duplication of R&D expenditure
- Find out what technology already exists and build on it



Technical
information



- Check where an invention is protected (and where it is not)
- Avoid infringing other people's patent rights



Legal
information



- Keep track of what others are doing
- Identify new partners, e.g. for licensing
- Spot trends in technology or the market

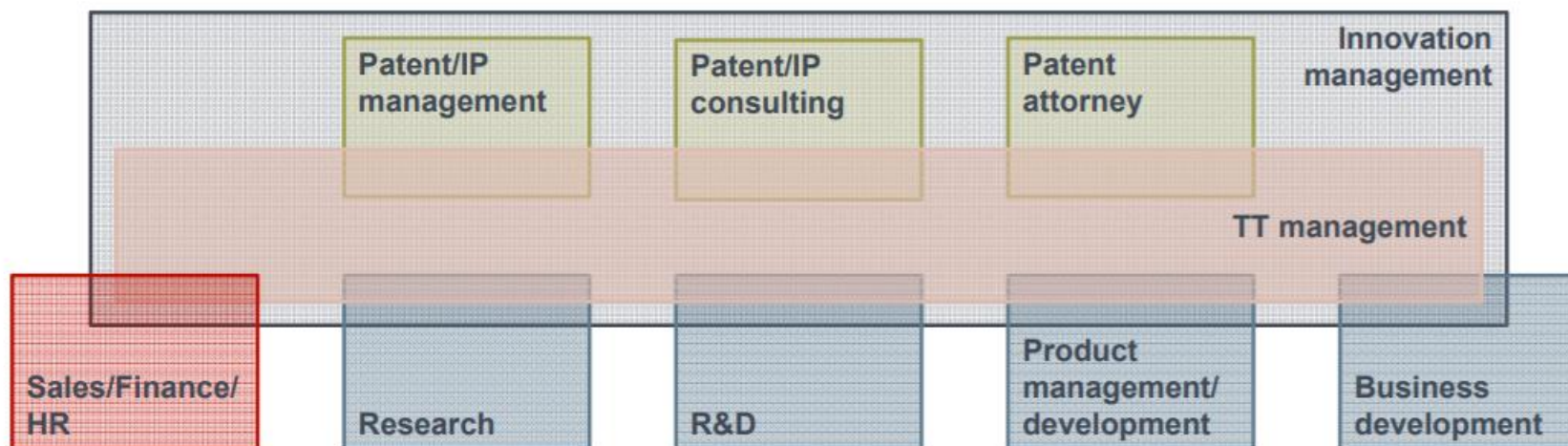


Business
information





Mapping of innovation process actors



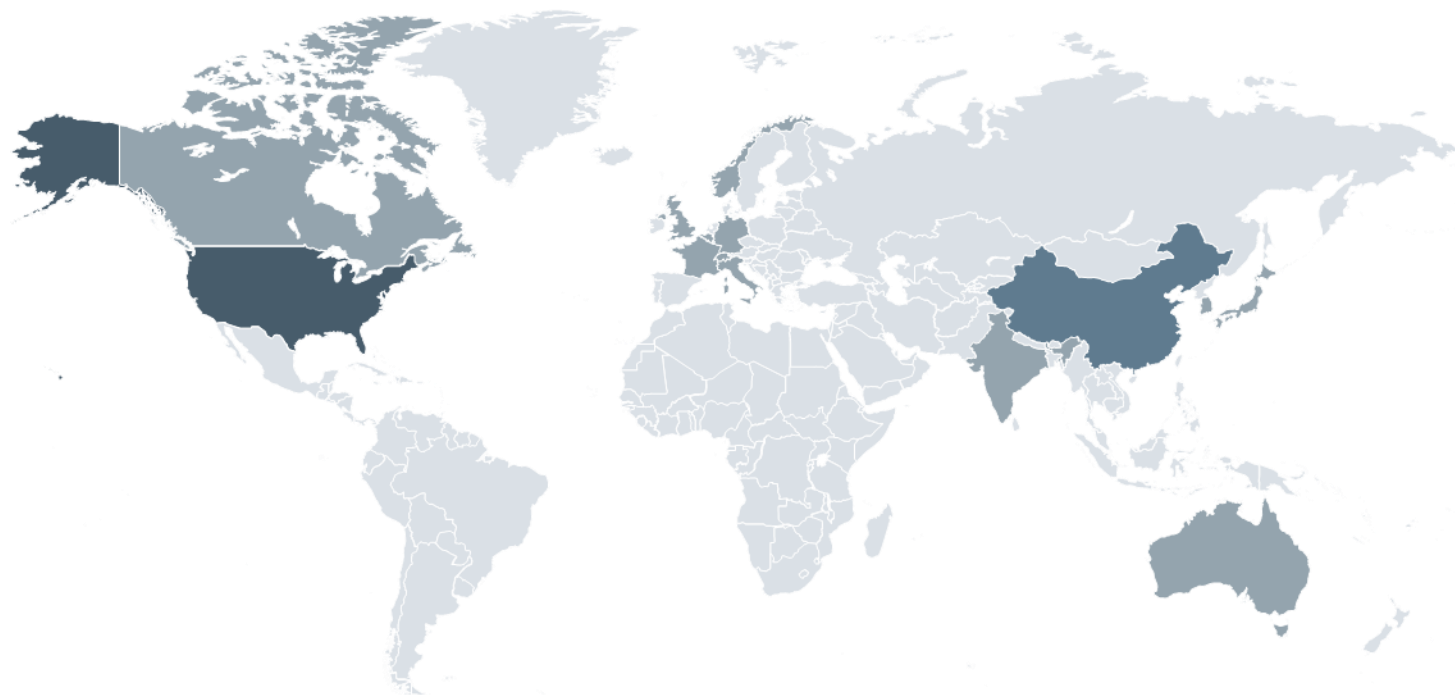


OTHERS





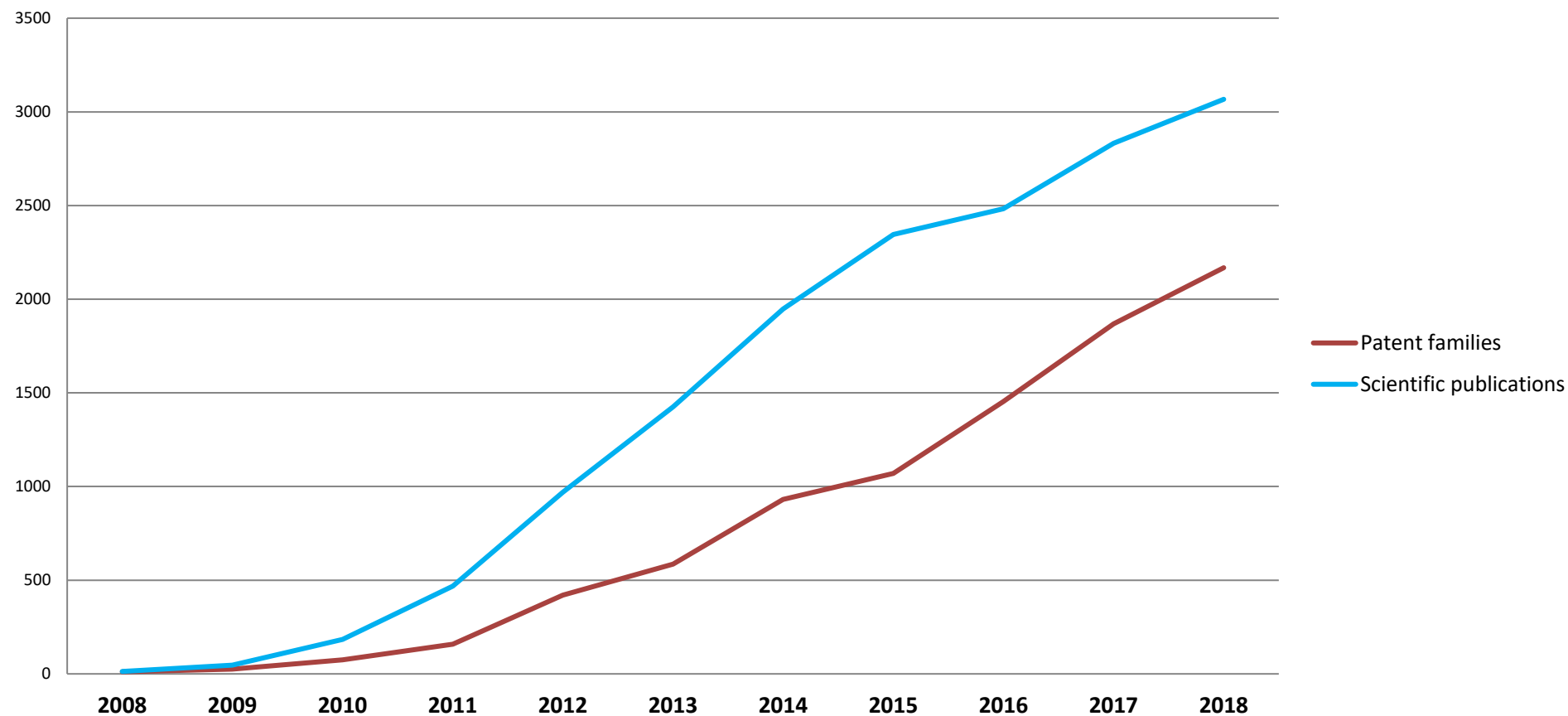




CAR T-cell Patent Activity



- Top applicants – league table
- Top inventors – league table
- Co-applications - existing partnerships
- Who influences whom? - citations
- Impact/importance/value - indicators



Trends Graphene Composites



epo.org/patent-index2024

TRENDS IN PATENTING

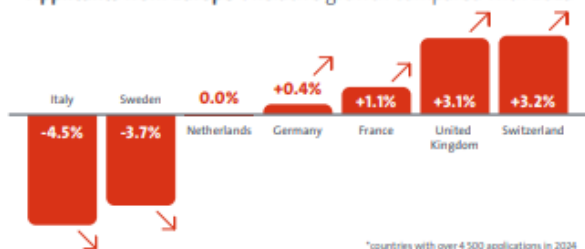
2024

Europe is an **attractive technology market**
for European and international companies

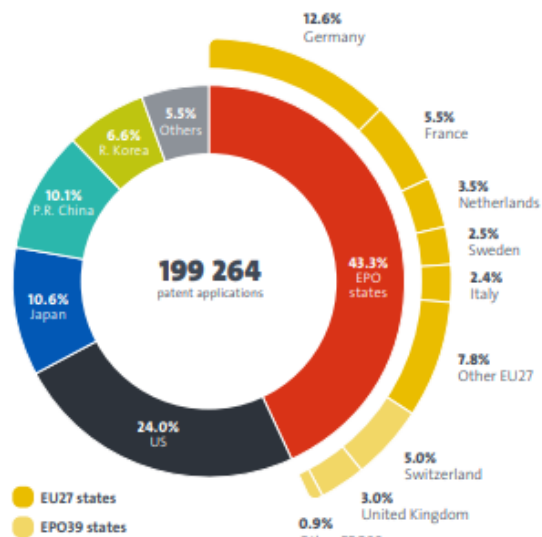
Total patent applications at the European Patent Office



Applicants from Europe*: Relative growth compared with 2023



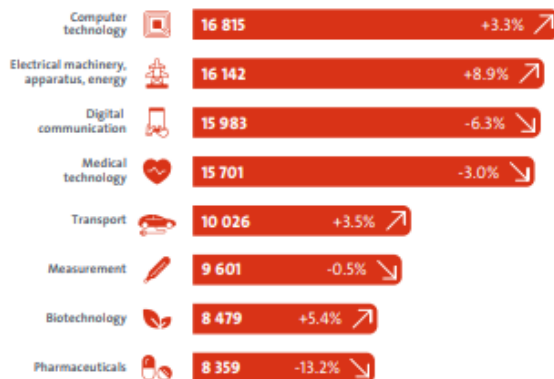
Countries of origin: The 39 member states of the EPO account for over 43% of all European patent applications



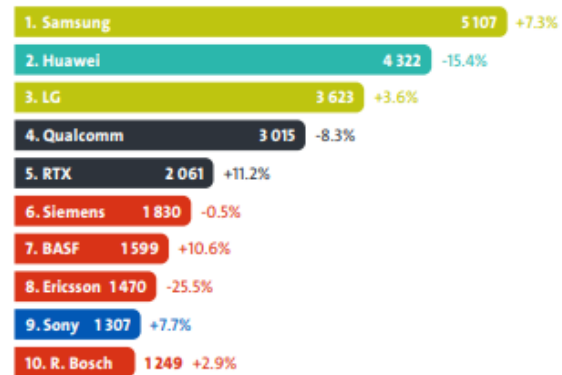
Growth in filings from the leading patent territories



Top technology fields: AI and battery technologies drive growth



Top applicants for European patents in 2024





Take home messages

Use (free) patent databases to **retrieve strategic information**.

Consult them **before** and **during** research,
development and commercialisation.
Throughout the innovation process

Patent information is an important source of
technical, legal and business-related information.

Use free sources to **identify existing technologies**, gaps in technology, **key players**,
potential **infringement** and **trends**.

Consult the experts for mission critical
decisions



Acknowledgements

- Prof. Frank Tietze – Innovation and Intellectual Property Lab. Cambridge University
- Prof. Fiona Lettice – Norwich Business School, University of East Anglia
- European Patent Office – directorate 5.4.2 Patent Information Promotion





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Thank you!

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