

## **European IP Helpdesk**

Stay ahead of the innovation game.

#### **Patents and Innovation**

10<sup>th</sup> March 2022





#### **European IP Helpdesk**

- Service initiative of the European Commission
- Addressing current and potential beneficiaries of EUfunded 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: 48 ambassadors from 28 EU countries





111 **Ambassadors** local IP support throughout Europe



Website

frequent updates from the world of IP and innovation



practical IP knowledge through high-level publications



**Events** 

info point at key networking events and conferences



ec.europa.eu/ip-helpdesk

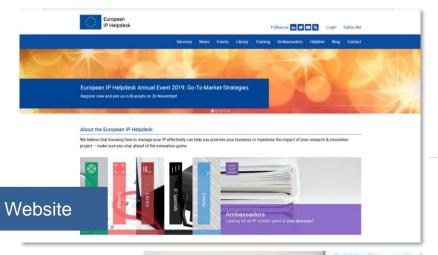


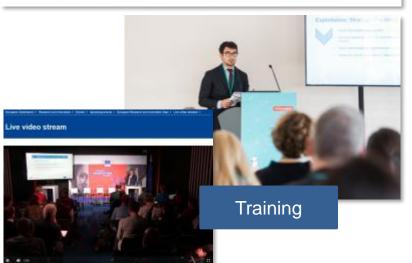
#### The EC IP Helpdesks





#### **Communication Formats & Outreach Tools**











#### **New Bulletin! Green Deal!**

#### **Contents**

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Towards a greener and more sustainable future

#### The European Green Deal: Is Plant IP Part of the Solution?\_5

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# Technology Transfer and Commercialisation for the European Green Deal\_\_\_\_\_\_

JRC study explores challenges linked to the deployment of green technologies through technology transfer

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Supporting green innovation and technology transfer

#### Patents for Tomorrow's Plastics\_13

EPO study reveals that Europe and US are leading innovation in plastic recycling and alternative plastics

#### Traceless Materials \_\_\_\_\_1

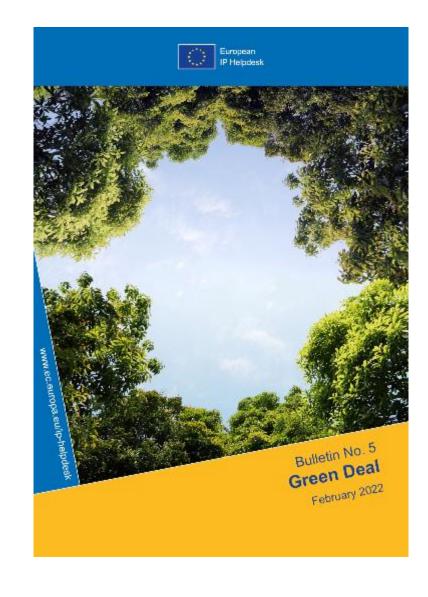
How a young circular bioeconomy start-up creates sustainable materials for a future without plastic

#### Green EU Trade Marks \_\_\_\_\_\_16

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#### News from the European IP Helpdesk Team \_\_\_\_\_\_1

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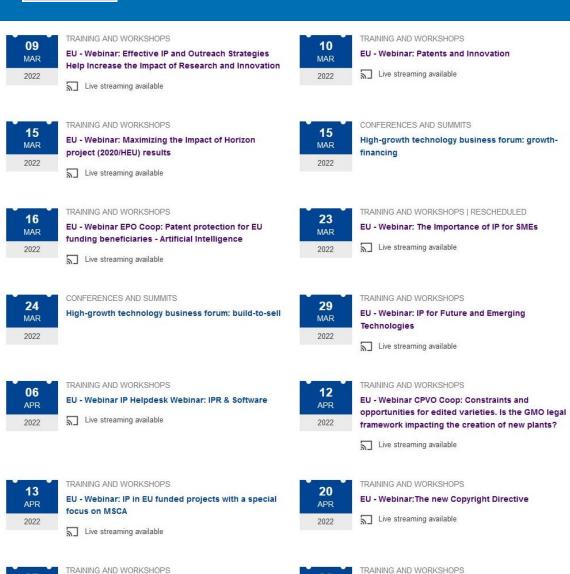


#### **Ambassador Scheme**

- Cooperation scheme with the Enterprise Europe Network (EEN): 48 ambassadors – 28 countries
- Building IP capacities among European SMEs
- Overcoming language barriers
- Making the topic more accessible
- Exchange and feedback from ambassadors on needs of SMEs
- Local awareness and training events







28

APR

2022

EU - Webinar: Freedom to Operate

Live streaming available



APR 2022

EU - Webinar: IP and Artificial Intelligence - Advanced

Live streaming available



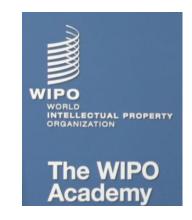
#### Further learning opportunities:

- 1. European IP Helpdesk Ambassadors and EEN
- 2. EUIPO learning portal
- 3. EUIPO Ideas Powered for business website
- 4. WIPO Academy / Diagnostics
- 5. The Ideas Powered for business SME Fund
- 6. <u>IPA4SME</u>
- 7. Horizon IP Scan
- 8. (IP Booster)
- 9. Horizon Results Booster
- 10. LeadershIP4SMEs
- 11. EPO Academy
- 12. 4IPCouncil











leadersh















Technology Production

Select this sector if you manufacture technology-related products. If you run a technology- related service, but do not manufacture any product, select 'Services'. Click to select



#### **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 Looooooooooong 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



### Roadmap

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







1 500 to 2 000 patents

Data-processing methods, semiconductor circuits, chemical compounds, etc.

Registered design

Shape of phone

Registered trade marks

Brand name, start-up tone

Copyright

Software, ringtones and

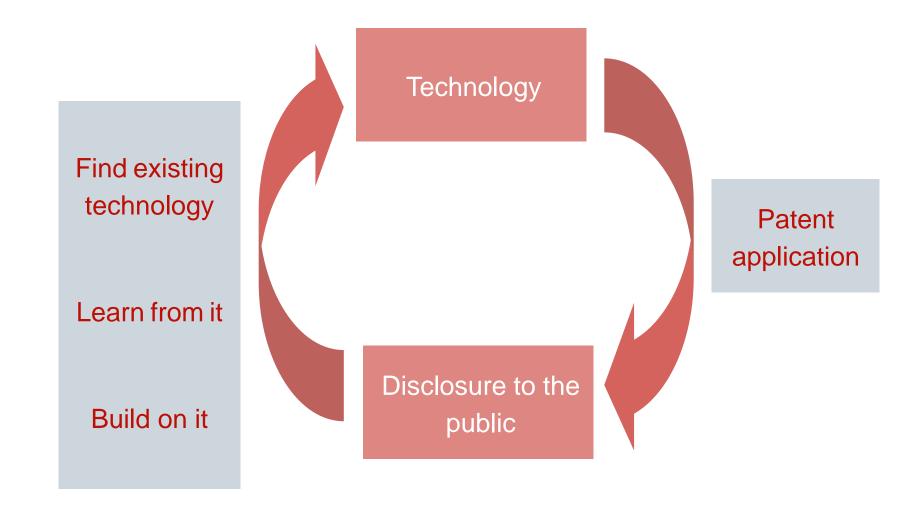
images



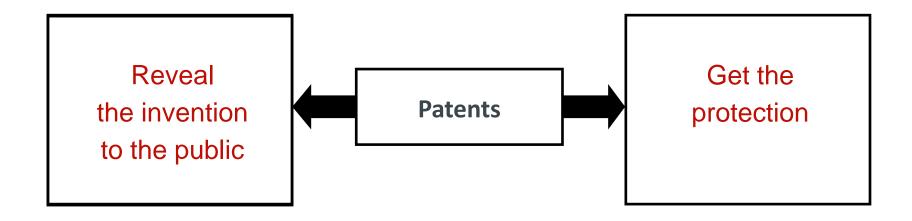
### Roadmap

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- Patent basics
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- Invention vs innovation
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### **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

Technical consumer goods, products, services



# **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

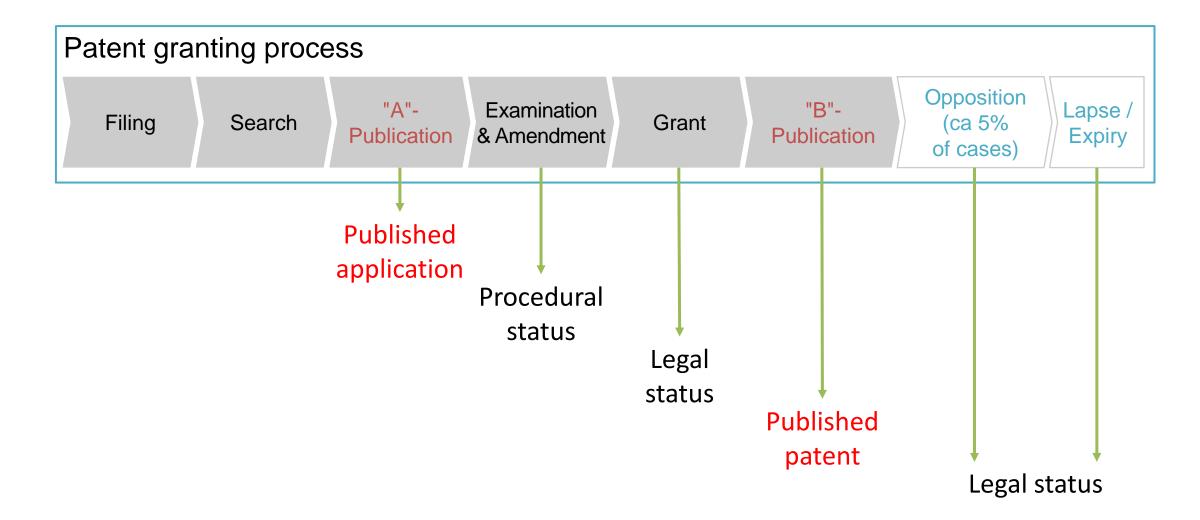


### Roadmap

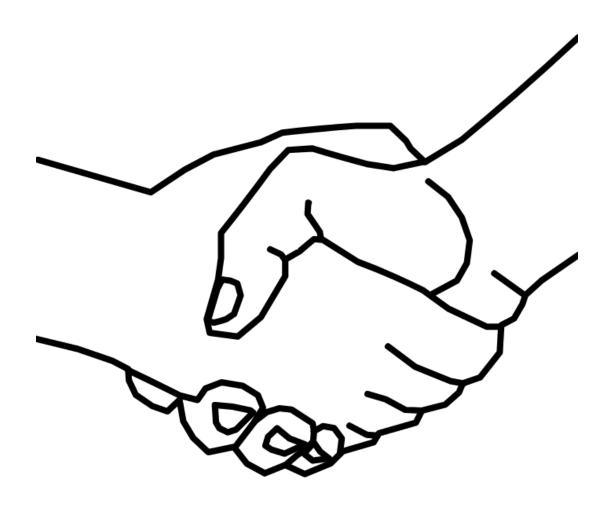
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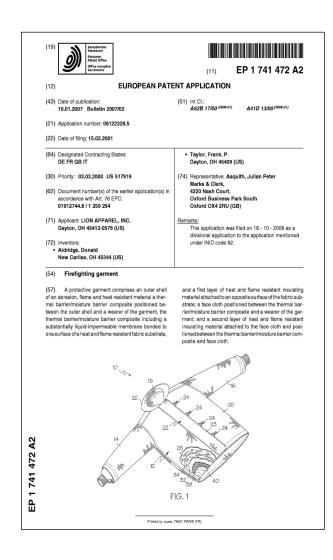












Title of the invention, name of the inventor

Detailed description of the invention: how it is constructed, how it is used, benefits compared with what already exists

Claims providing a precise definition of what the patent protects

#### Drawings

Abstracts: summary of the invention – particularly useful for search engines





# Structure of Patent Documents

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



(12)

Europäisches Patentamt

Office européen des brevets



EP 1 000 000 A1

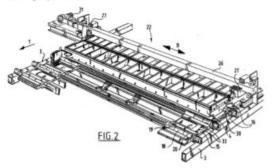
#### EUROPEAN PATENT APPLICATION

- (43) Date of publication: 17.05.2000 Bulletin 2000/20
- (51) Int. CL7: **B28B 5/02**, B28B 7/00,
- (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
- (30) Priority: 12.11.1998 NL 1010536
- (71) Applicant: Beheermaatschappij De Boer Nijmegen B.V. 6541 BS Nijmegen (NL)
- 72) Inventor: Kosman, Wilhelmus Jacobus Maria 6562 DA Groesbeek (NL)
- (74) Representative: Schumann, Bernard Herman Johan et al Arnolid & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1 2517 GK Den Haag (NL)

#### 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 (ally 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 probruding edge is formed on at least one side of the green bricks.



EP 1 000 000 A



# **Front Page**

**Dates** 

Priority, application, publication nos.

IPO ID

**Inventors** 

**Applicants** 

Representatives

**Titles** 

Classification

**Abstracts** 

Image (if available)



Europäisches Patentamt

European Patent Office

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11) EP 1 000 000 A1

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(51) Int. Cl.7: B28B 5/02, B28B 7/00,

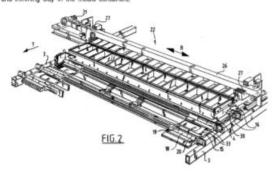
B28B 1/29

(74) Representative: Schumann, Bernard Herman Johan et al Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1 2517 GK. Den Haag (NL)

#### (54) Apparatus for manufacturing green bricks for the brick manufacturing industry

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means (11) for supplying and placing take-off plates for the green bricks, 173) 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.



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# **Description**

**Enabling disclosure** 

Rigorous

Language sometimes difficult

Text, keywords, synonyms

Description

[0001] The invention relates to an apparatus for manufacturing green bricks from clay for the brick manufacturing industry, comprising a circulating conveyor s 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 15 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

[0002] A recent demand has developed on the market for bricks which appear as if they have been manufactured according to traditional methods.

[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 aspearance.

[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.

[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 asethetic effect is an important commercial advantage.

[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.

[0007] In a practical preferred embodiment the edge-forming means are adapted to move the mould container parts substantially transversely of the transporting direction.

[3008] In a further preferred embodiment the edgeforming 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.

[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 during operation at the location of the side walls of the mould container part. An exceptionally compact embodment of the invention is hereby realized which utilizes the available space economically and can be arranged without difficulty on the known apparatus.

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[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 plassic. In preference the stop members of the frame of the edge-forming means are also provided with these, preferably plastic, stop surfaces.

[0011] The invention is described in more detail hereinbelow with reference to the drawing in which:

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 edgeforming 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 inven-

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.

[0012] Like components are provided in the figures with like reference numerals.

[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 45 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 day 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 contain-

[0014] Edge-forming means 22 are arranged 55 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.



#### **Claims**

Claimed scope of protection (as filed)

Independent and dependent claims

Product, process, apparatus, use

Text, synonyms

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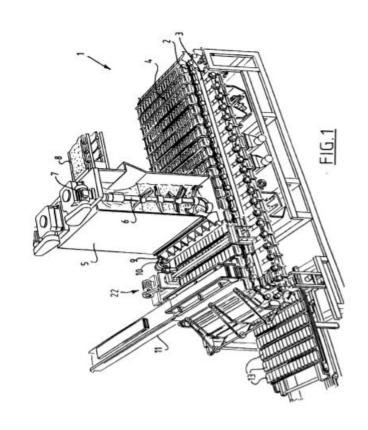
- Apparatus as claimed in claim 1, wherein the edgeforming means are adapted to move the mould container parts repeatedly for a certain period.
- Apparatus as claimed in claim 1 or 2, wherein the sedge-forming means are adapted to move the mould container parts substantially transversely of the transporting direction.
- Apparatus as claimed in any of the foregoing 10 claims, wherein the edge-forming means comprise a frame which is adapted to engage individually on a mould container part.
- 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.
- Apparatus as claimed in claim 5, wherein the stop members are provided with stop surfaces which preferably comprise plastic.
- Apparatus as claimed in claim 5 or 6, wherein the 25 mould container parts are provided on their side walls with stop surfaces which preferably comprise pleatic.
- Apparatus as claimed in claim 4, 5, 6 or 7, wherein 30 the edge-forming means comprise an eccentric drive for the frame.
- 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.
- Apparatus as claimed in any of the foregoing 40 claims, wherein the mould container parts are fixed movably onto the conveyor with some clearance in the direction of movement.
- 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.



**Drawings** 

Worth a thousand words

EP 1 000 000 A1





# **Search Report**

X – novelty

Y-Y - inventive step

A - general prior art

EP 1 000 000 A1



		ERED TO BE RELEVANT		
Category	Citation of document with it of relevant pass	ndication, where appropriate, ages	Relevant to daim	CLASSIFICATION OF THE APPLICATION (INLCL7)
A	EP 0 680 812 A (BOE DE) 8 November 1995 * the whole documen		1,10,11	B28B5/02 B28B7/00 B28B1/29
A	NL 9 400 663 A (BOE DE) 1 December 1995 * the whole documen		1,3	
A	DE 35 46 191 A (NET 2 July 1987 (1987-0 * the whole documen		1-3,8	
				TECHNICAL PIELDS SEARCHED (MLCLT)
				B28B
	The present search report has		1	
	Place of search	Date of completion of the search		Earte
	THE HAGUE	15 February 2000		ırier, P
	ATEGORY OF CITED DOCUMENTS foulsely relevant if baken alone foulsely relevant if combined with ano unsent of the same category mological background i-written declosure mediate document			



## Roadmap

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





# Invention – mouse kept alive for more than 90 years



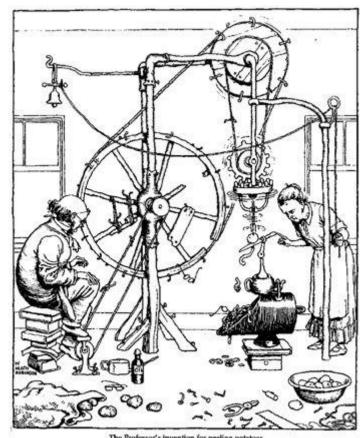




### Invention

• EPO – no definition of "invention"

- Except: "technical effect"
- Technical?



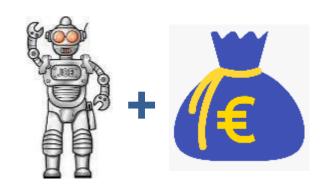
The Professor's invention for peeling potatoes.



### **Innovation**

- Technical innovation
- A process
- From ideation to commercialisation







### **Innovation** ≠ **Invention**



#### **CREATIUITY**

The act of turning new and imaginative ideas into reality.



#### **INVENTION**

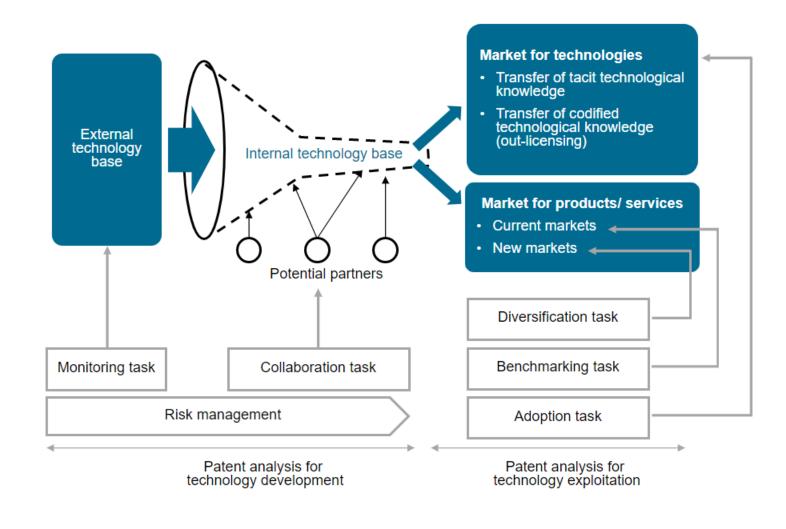
Creation of a new idea or concept

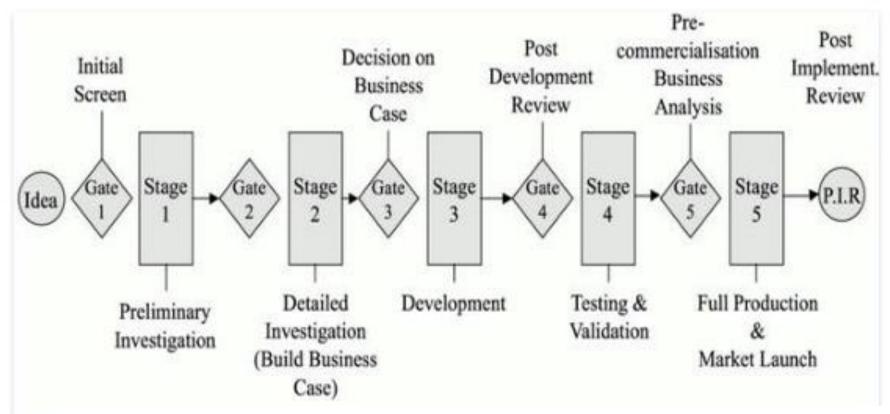


#### INNOUATION

Turning a new concept into commercial success or widespread use

Source: https://innoway.me|@innoway\_me





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
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# The role of patent information in innovation

#### **EPO 2017**

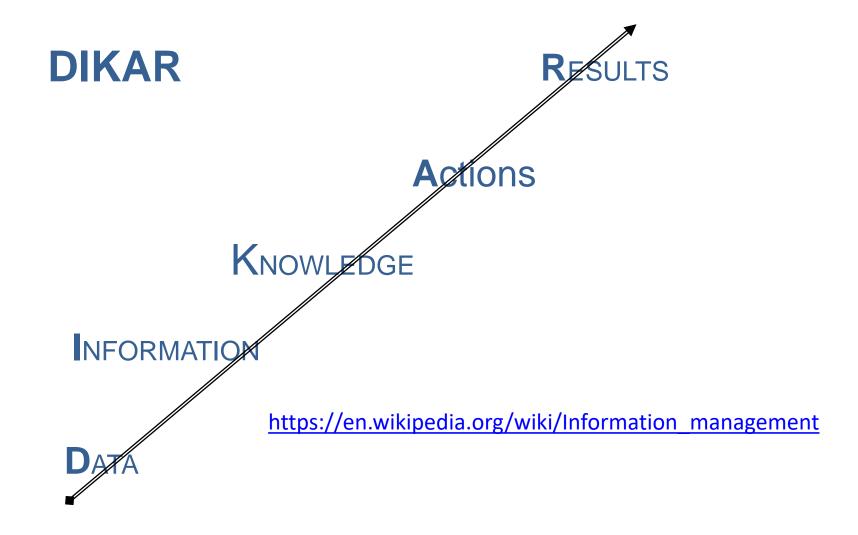
https://documents.epo.org/projects/babylon/eponet.nsf/0/F2E016B9DA1EC24A C125813D0056D720/\$File/information in the innovation process survey results en.pdf



Does patent information support

innovation?







#### Research

Model of the innovation process



#### Identify innovators

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



- 1. small group, qualitative answers
  - $\rightarrow$  list of questions
- 2. larger group, quantitative evaluation

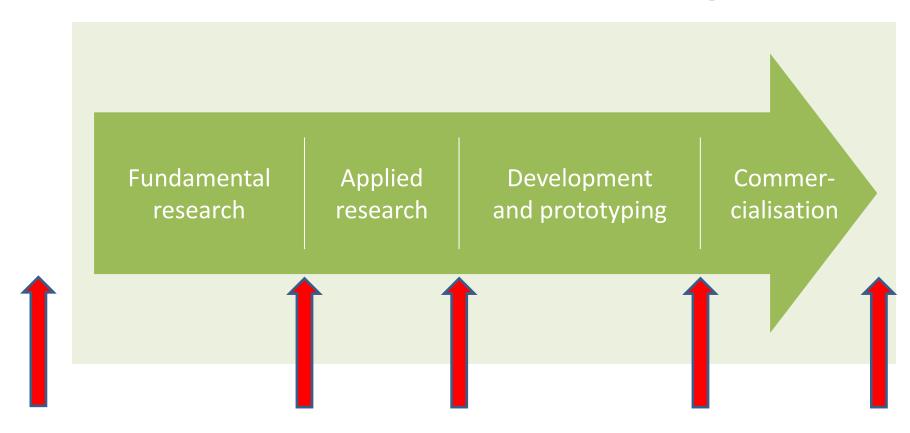


supported by market research experts





## The innovation process

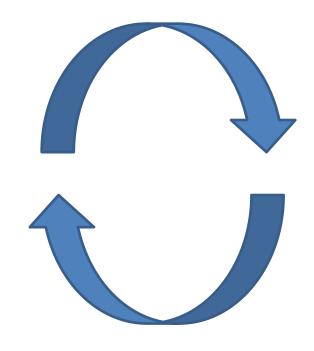




## Linear – one off - process



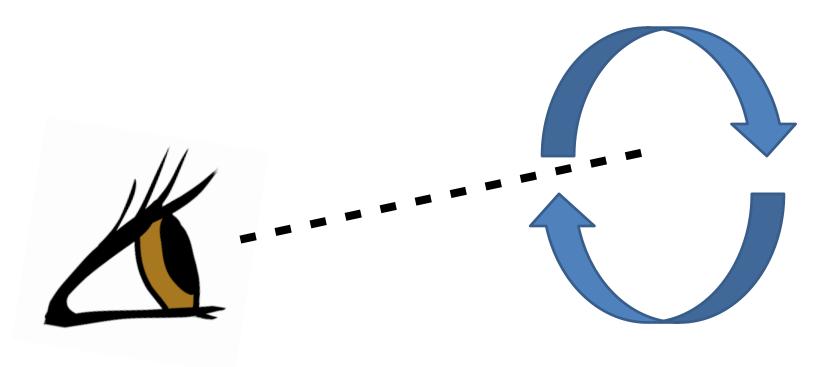
## Innovation cycle – continued innovation



The first rule of business is to stay in business

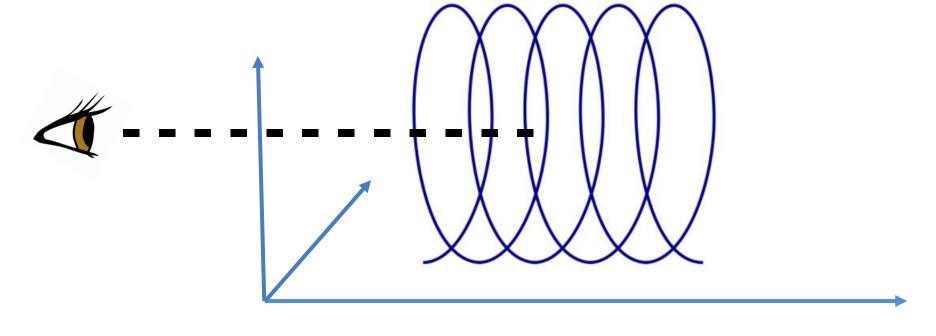


## Innovation cycle – continued innovation





## Helix





#### **Applications of patent information**

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

Upstream

Downstrear



- 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







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





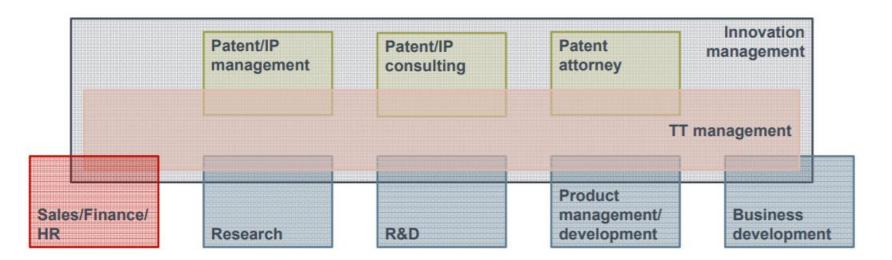
- Keep track of what others are doing
- Identify new partners, e.g. for licensing
- Spot trends in technology or the market

**Business** information

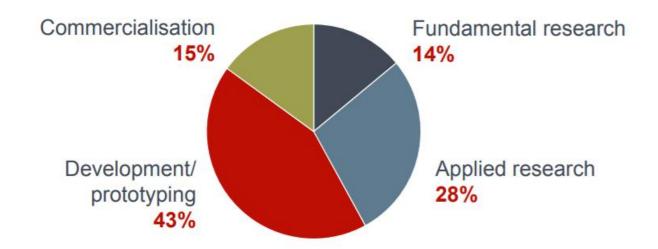




#### Mapping of innovation process actors

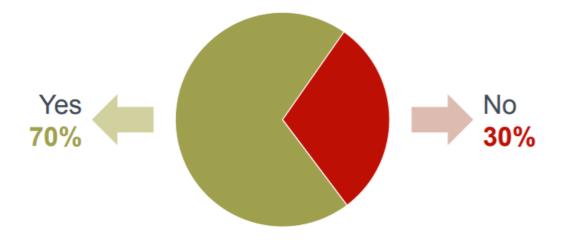


## Innovators' activity



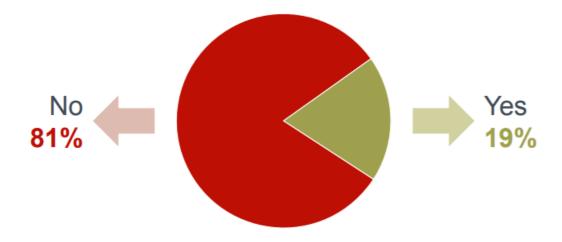
## Users vs. non-users of patent information as information source

Are patents used as a source of information in the innovation process?



# Past usage of patent information as an information source

Have you used patent information in the past?



#### 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

- Dr 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



#### Thank you!

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