

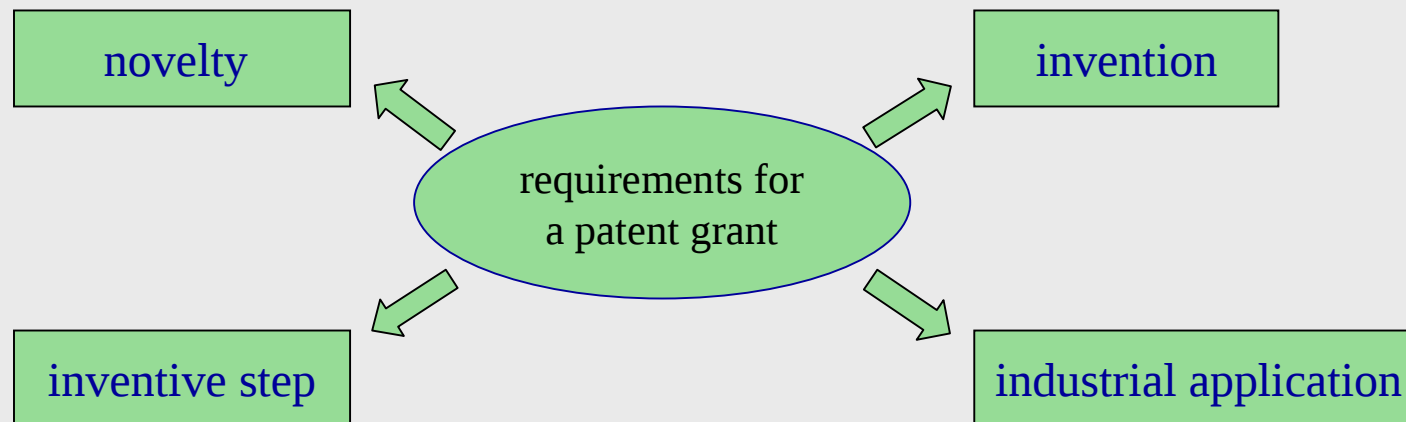
Patent Law and Patent Search

Patent Law

- Patent law as part of intellectual property rights
 1. Competition law/trademark law
 - business activities and marketing activities
 - trademark protection
 2. Design law
 - design, colours, forms/shapes
 3. Copyright
 - focus on creation: literature, music,...
 - is generated by creating the book, song,...
 4. Patent law/utility models
 - focus on invention
 - technical/engineering

Approach to Patent Law

- § 1 PatG: requirements for a patent grant
„patents will be granted for inventions that are new, based on an inventive step and suitable for industrial application.“



Invention

- Not defined by law
- It exists a negative checklist in the German patent law:
 - Discoveries, scientific theories, mathematic methods
 - Aesthetic creation of forms
 - Plans, rules and methods for theoretical activities, for games or business activities and data processing software
 - Publication and exploitation must not violate public moral and ethical principles

Novelty

- An invention is not part of the state of the art:
 - Requirement of absolute novelty
 - Relevant date: day of application/filing date, priority date
- State of the art:
 - Every kind of knowledge that has been published before the filing date.
 - Patent applications that are not yet published
 - It must be possible to detect the invention's character

Inventive Step

- The doctrine must not result from the state of the art in an obvious way for an expert
- Objective evaluation by an average expert which is skilled in the respective area
- Basis of evaluation: publicly available state of the art
- BUT: possibility of combinatorial inventions

Industrial application

- Includes all types of businesses but not independent professions
- An invention has to be useful
- Exceptions: medical diagnosis and treatment methods are excluded from patent protection

Who is inventor?

- Inventor is the person whose knowledge the invention originates from or by whose mental effort the doctrine was developed
- This does not hold for simple assistant work or the inspirer
- Co-inventions are possible

Who is applicant?

- The applicant is not necessarily the inventor
- The applicant is allowed to commercialize the invention
- In principle the inventor owns the patent
- The right for application can be transferred by law or contract

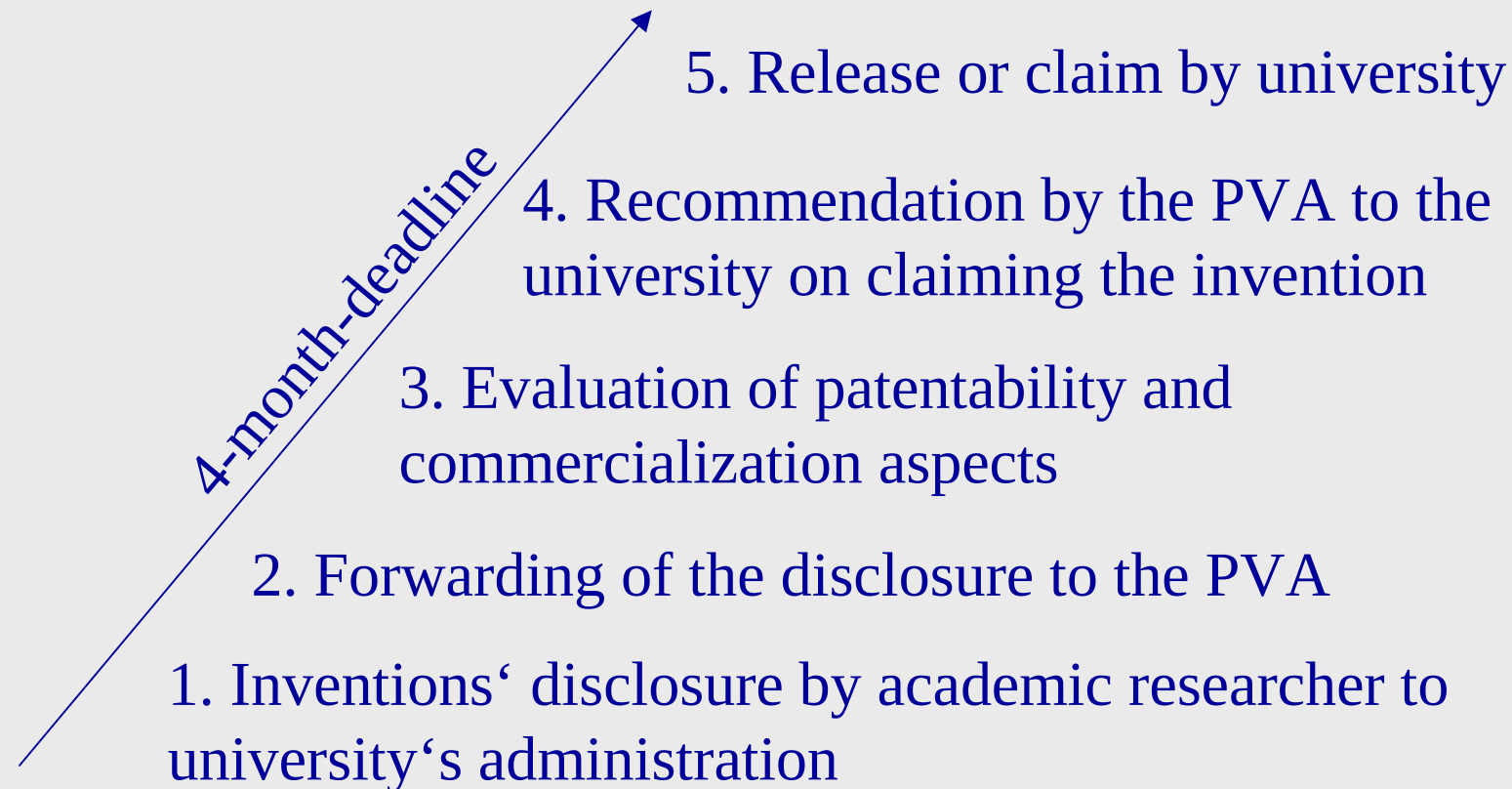
Law on employees' inventions

- Exception from the principle that the patent belongs to the inventor
- The right of application und thus of commercialization is therefore transferred to the employer
- Premise for this: the invention is an employees' invention
- Invention made during work <—> based on work experience
- Until 2009: The employer has to claim the invention
- From now on: The employer has to release the invention

Rights and obligations of the inventor (employee) / of the employer

- Inventions' disclosure by the employee
- The employer has the possibility to claim the invention (old) or to release the invention (new)
- Obligation to file a patent application
- Right to be adequately compensated
- Special regulations for universities (§42 ArbNErfG)

Proceedings at Saarland University



Patent Application (national/international)

- Application is necessary to get the priority
- Priority deadline: 1 year
- PCT-Application
- European patent application/European patent
- After 30 months: start of national/regional phase

Examination procedure

- Search report/examination report
- Publication
- Grant
- Opposition/limitations proceedings
- Complaints procedure/action of nullity

Application Fees

- Filing fees
- Search/examination fee
- National fees for international patent applications
- Renewal fees
- Patent attorney's fees

Structure of patent applications

- Four parts: Front page, Description, Claims and Drawings
 - ➔ Front page
 - ➔ Bibliographic data (patent number, applicant, inventor, title)
 - ➔ Abstract
 - ➔ Important drawing

Structure of patent applications

- ➔ Description of the invention
 - ➔ State of the art
 - ➔ Criticism of the state of the art (disadvantages, deficiencies, risks)
 - ➔ Definition of the problem to be solved
 - ➔ Explanation of the approach
 - ➔ Description of the solution
 - ➔ Examples



Structure of patent applications

→ Claims

define the extent of protection of the invention = core of the patent application

→ Drawings

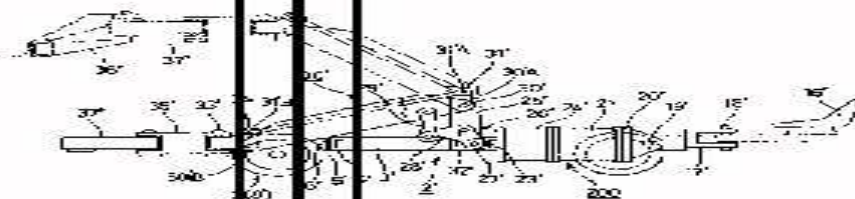
used for clarification and explanation of correlations
(useful for further understanding)

INID-Codes

- International agreed numbers for the identification of data
- Possibility of identifying different details on patent documents without knowing the specific language of the patent
- Can be found in detail on the internet:

<http://www.wipo.int/standards/en/pdf/03-09-01.pdf>



Anmeldenummer	Internationale Patentklassifikation
Dokumentenart	Dokumentennummer
Patentamt	
	Publication number: 0 673 875 A2
EUROPEAN PATENT APPLICATION	
Anmeldedatum	Application number: 95201052.8
Teilanmeldung	Date of filing: 10.09.92
Prioritätsangaben	This application was filed on 25 - (M) - 1992 as a divisional application to the application mentioned under INID code 30. Priority: 24.09.91 JP 245425/91 20.11.91 JP 304752/91 Date of publication of application: 27.09.95 Bulletin 95/39 Publication number of the earlier application in accordance with Art.76 EPC: 0 534 663 Designated Contracting States: BE CH DE DK FR GB IT LI NL SE
Benannte Vertragsstaaten	Applicant: MITSUI ENGINEERING & SHIPBUILDING CO., LTD. 6-4 Tsukiji 5-chome, Chuo-ku Tokyo (JP) Inventor: Ohashi, Hirotsugu, c/o Mitsui Engineering Co. Ltd. 6-4, Tsukiji 5-chome Chuo-ku, Tokyo (JP) Inventor: Yasunobo, Toru, c/o Mitsui Engineering Co. Ltd. 6-4, Tsukiji 5-chome Chuo-ku, Tokyo (JP) Representative: Rees, Alexander Ellison et al J. Miller & Co. 34 Bedford Row Holborn GB-London WC1R 4JH (GB)
Titel der Erfindung	Load balancer.
Zusammenfassung	A load balancer adapted to set the load on an article to substantially zero by utilising air pressure, and provided with a balance cylinder unit consisting of air brakes, a balance cylinder and a weighing sensing cylinder. This balance cylinder unit is formed by arranging the balance cylinder pivotally and horizontally to the chassis frame of a vehicle.
Dokumentenartencode	
Patentamtscode (Ländercode)	EP 0 673 875 A2
Patentnummer der Stammanmeldung	Patentanwalt bzw. Vertreter
Veröffentlichungsdatum des ungeprüften Dokuments	Erfinder
	Anmelder

IPR issues and exploitation activities at Saarland University

Axel Koch

Point of departure in Germany

- Before 2002: most German universities did not file any patent applications and transferred inventions coming from industrial co-operations to the partner for free
- Change of the German Employee Invention Act in 2002
 - Abolition of the so-called professors' privilege
 - New § 42 ArbNErfG
- Establishment of regional Patent Marketing Agencies (PVA)
- Subsidized by the federal and the regional government



Patent Marketing Agency of Saarland Universities

- Founded in 2002
- Part of WuT GmbH
- With currently 3 employees (FTE) and 3 student assistants a small institution which is very closely-linked to Saarland University
- Responsible exclusively for the evaluation and commercialisation of all inventions created at Saarland Universities
- Patent applications are made through external patent attorneys

Funding

- Partly funded by Saarland University, regional and national ministries and through money coming from the commercialisation activities
- The funding is continuously decreasing
- The break-even point should be reached in 2013



Strategy: co-operation agreements

- IPR in co-operation agreements are an important factor on the way to the break-even point
- No transfer of inventions to companies free of charge
- Avoidance of lump-sum payments, if possible royalties
- Partner company covers patent costs



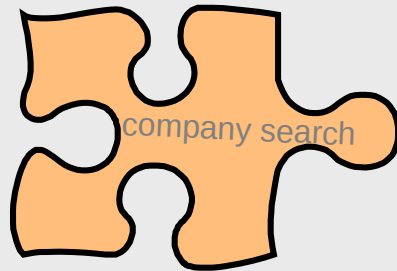
Strategy: licence and sales agreements

- No lump sum payments if possible
- Generally preference of licences to sales
- Negotiation of adequate down payments, minimum licence fees and royalty payments
- Conditions are defined on a case to case basis

Strategy: start-ups

- Transfer of IP rights to the start-up
- Relatively low down payment based on patent costs
- No minimum licence fee but obligation to exercise the licence
- Royalty payments are compulsory
- If one of the inventors is involved in the spin-off, he has to waive the inventors' bonus

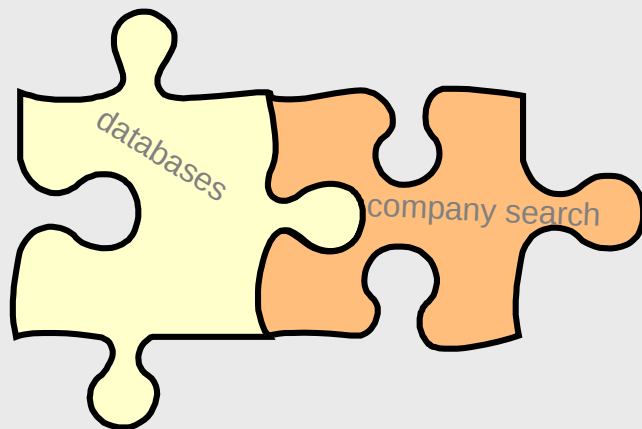
Exploitation strategy: Marketing activities



Company contacts

- „Blind“ acquisition of potential licensees:
 - Database and internet research
 - Telephone
 - Letter with abstract and fax answer
- Direct contact
 - Existing contacts of inventors
 - Existing contacts of PVA (own database)

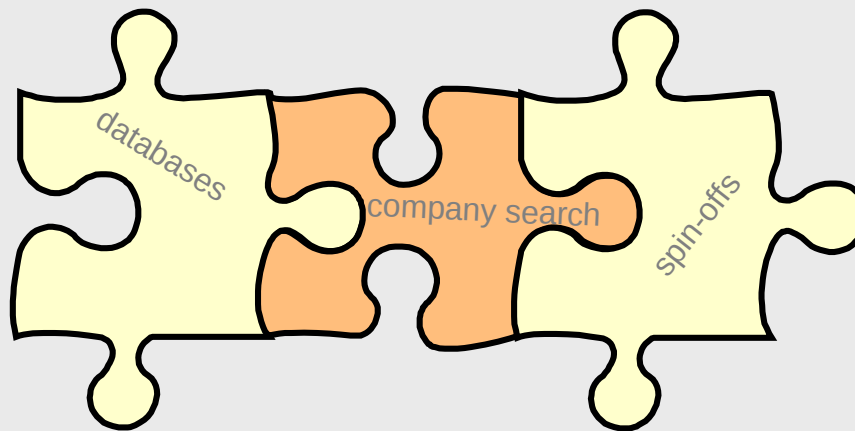
Exploitation strategy: Marketing activities



Databases

- EEN
 - Addresses European SMEs
- Database of TA
 - Connected to PVA-homepage
- Technology related databases
 - Lifesciencelink, Pharma-Transfer, TechEx etc.

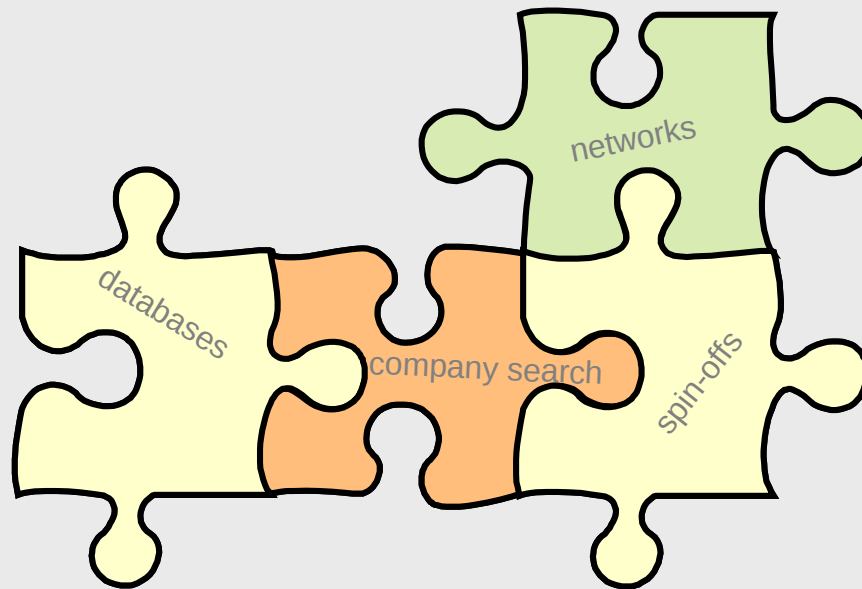
Exploitation strategy: Marketing activities



Start-ups

- Big start-up „mentality“ at Saarland University
 - since 1995: >200 companies
 - 5 start-ups based on university inventions

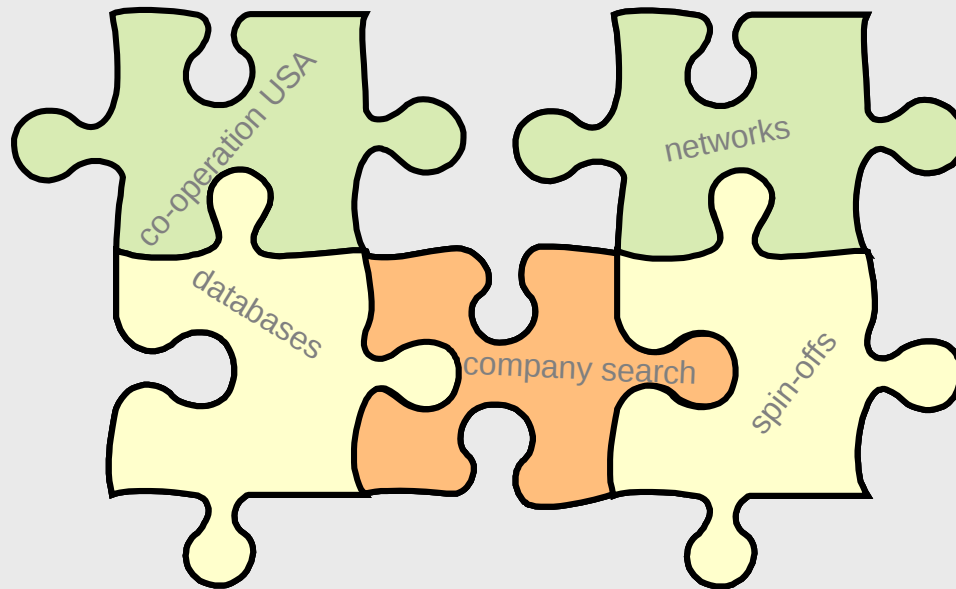
Exploitation strategy: Marketing activities



Exploitation through networks

- Network of small PVAs
 - Collective marketing of technology offers
 - Creation of patent pools
- PVAs in the Greater Region
 - European project application
 - Goal: Access to bigger market

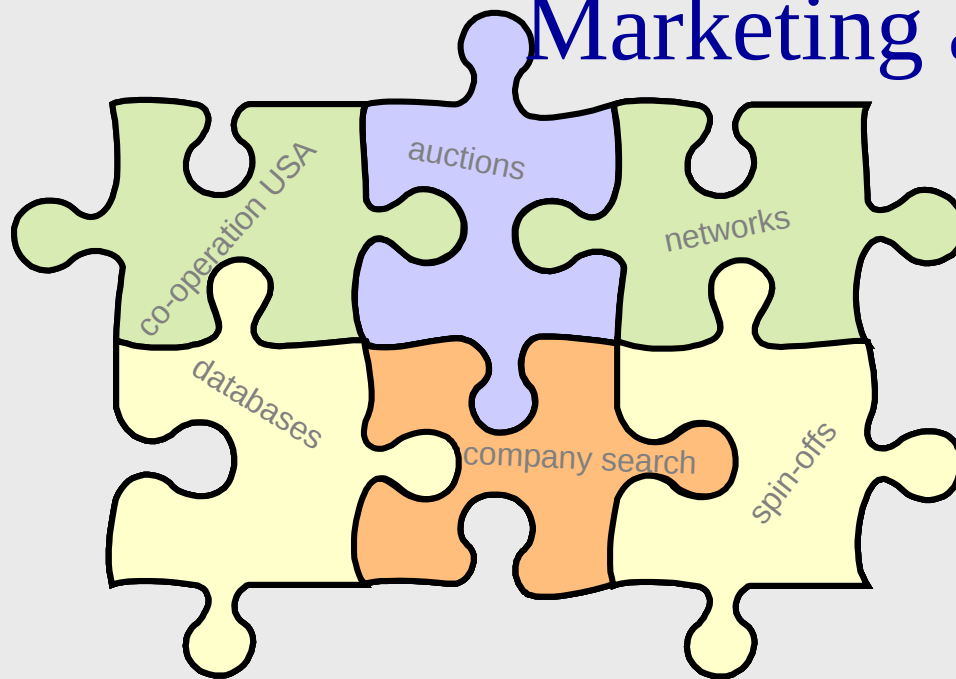
Exploitation strategy: Marketing activities



For US market co-operation with ip-Xpress

- US market is very difficult to approach
- Currently search for new American partner

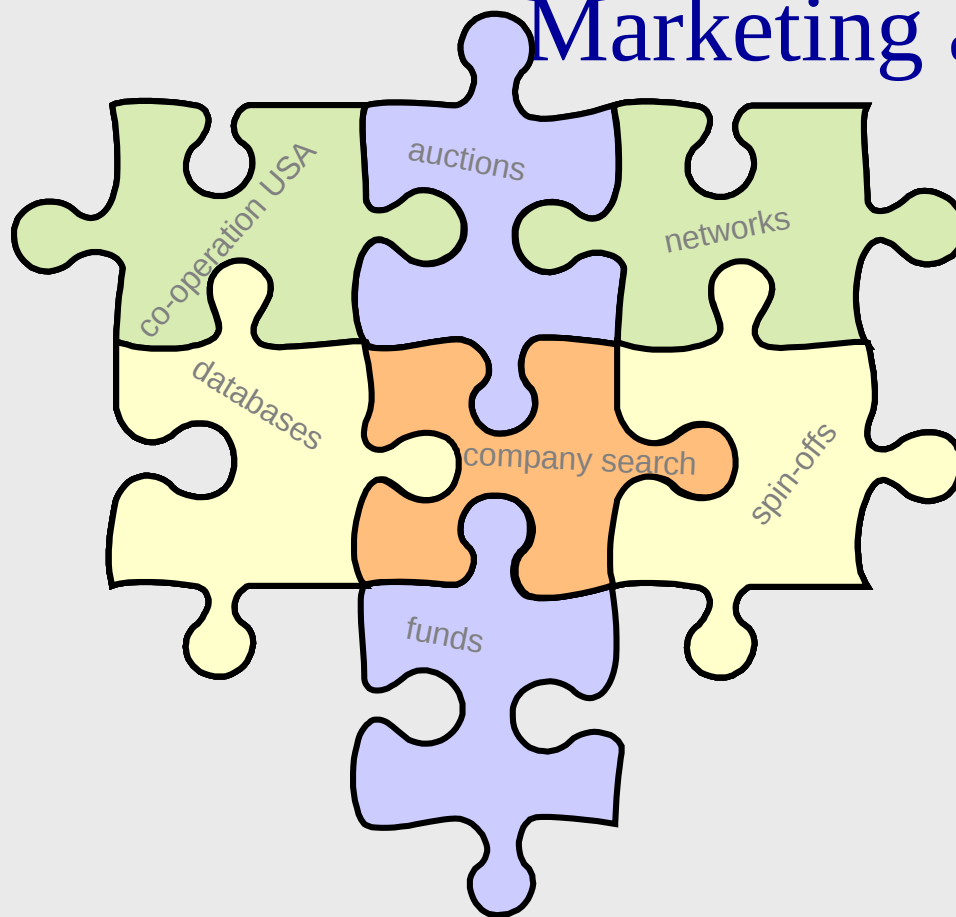
Exploitation strategy: Marketing activities



Patent auctions

- May 2007 first auction in Europe with moderate success
- In USA very well established
- Participation in one auction in June 2008 with good success
- In future auctioning of selected patents will be considered as another marketing strategy

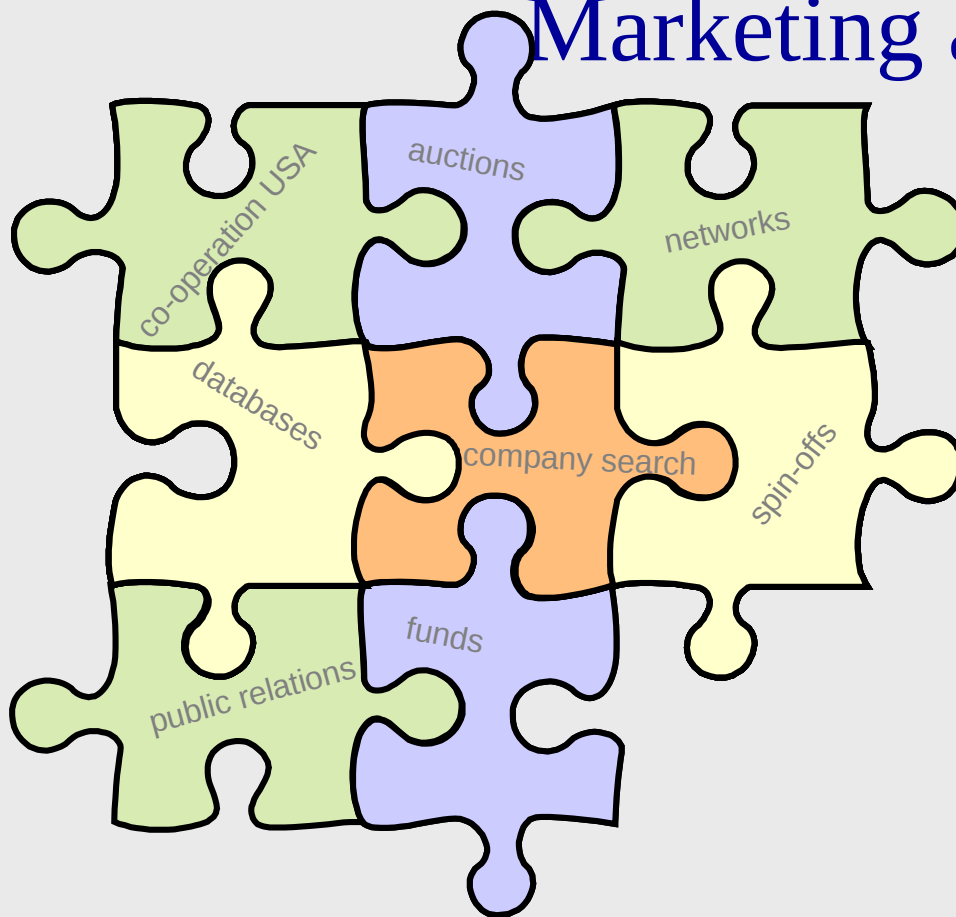
Exploitation strategy: Marketing activities



Patent funds

- Concept:
 - Acquisition of patents
 - Financing of further development
 - Out-licencing
- Until now: 2 patent families sold to fund of Deutschen Bank
 - Lump-sum payment and profit sharing

Exploitation strategy: Marketing activities



Public relations – collateral activities

- Seminars for SMEs
- Press releases
- Success Stories

Present success

Quantitative:

- More than 350 invention disclosures
- More than 100 patent filings
- 57 licence or sales agreements

Qualitative:

- Very positive evaluation by scientists, university management and co-operating companies

Goals for the future

- Closer co-operation with similar institutions on a national and international level
- Creation of a bigger patent portfolio in order to reach a critical mass for the commercialisation
- Negotiation of as many as possible long-term licence contracts instead of lump-sum sales
- Passing the break-even point

Search in patent databases

Outline

- Objectives of the patent search
- What types of searches are there?
- Where to find patent-based information?
- How to do a patent search (with examples)?
- Exercises on patent search

Objectives of the patent search

Novelty Search (1)

- Specific search about a topic of a planned R&D activity, which might produce patents
- Aim: A search creating no hits so subsequent R&D activities can be started
- Risk: no hits might mean there is no relevant literature but it is also possible that the search items were wrong or too selective

Objectives of the patent search

Competitor search (2)

- Applications and patents of other companies or research facilities in my field of research
- What does the competitor do and how?

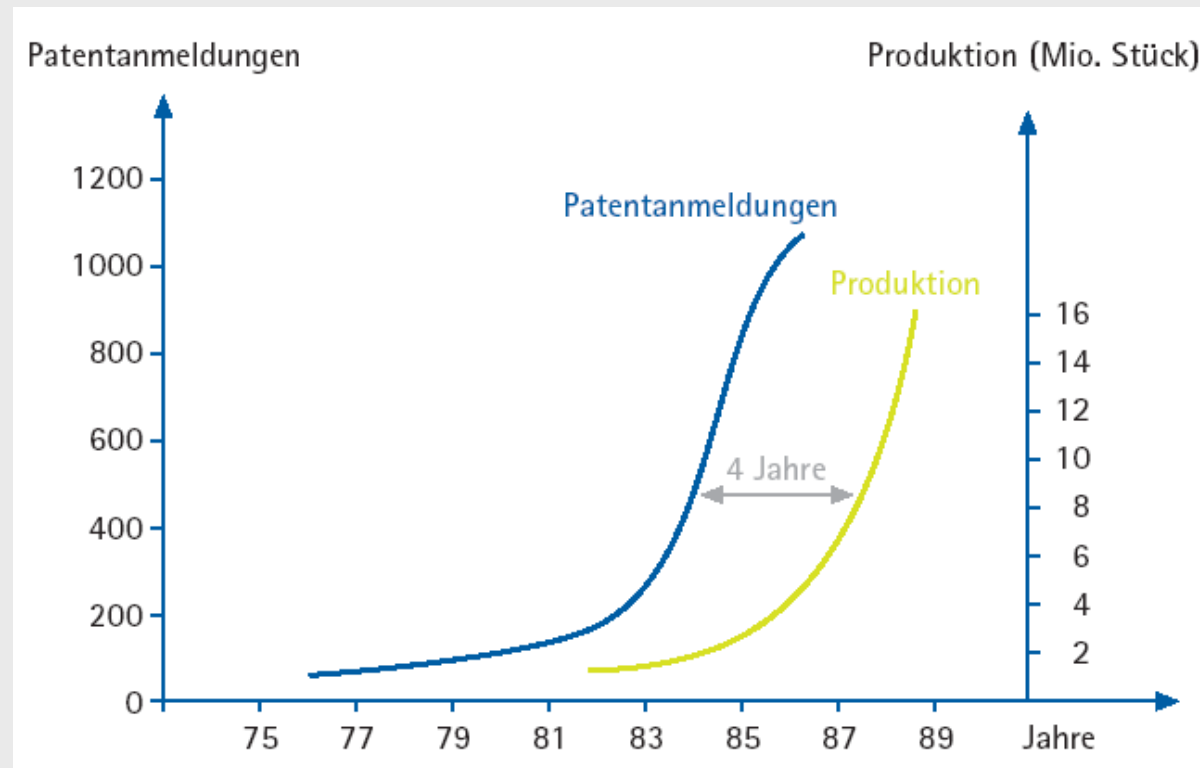
Objectives of the patent search Technology search (3)

- Search for additional or advantageous technical solutions
- Problem based approach $\Rightarrow$ looking for specific solutions



Objectives of the patent search

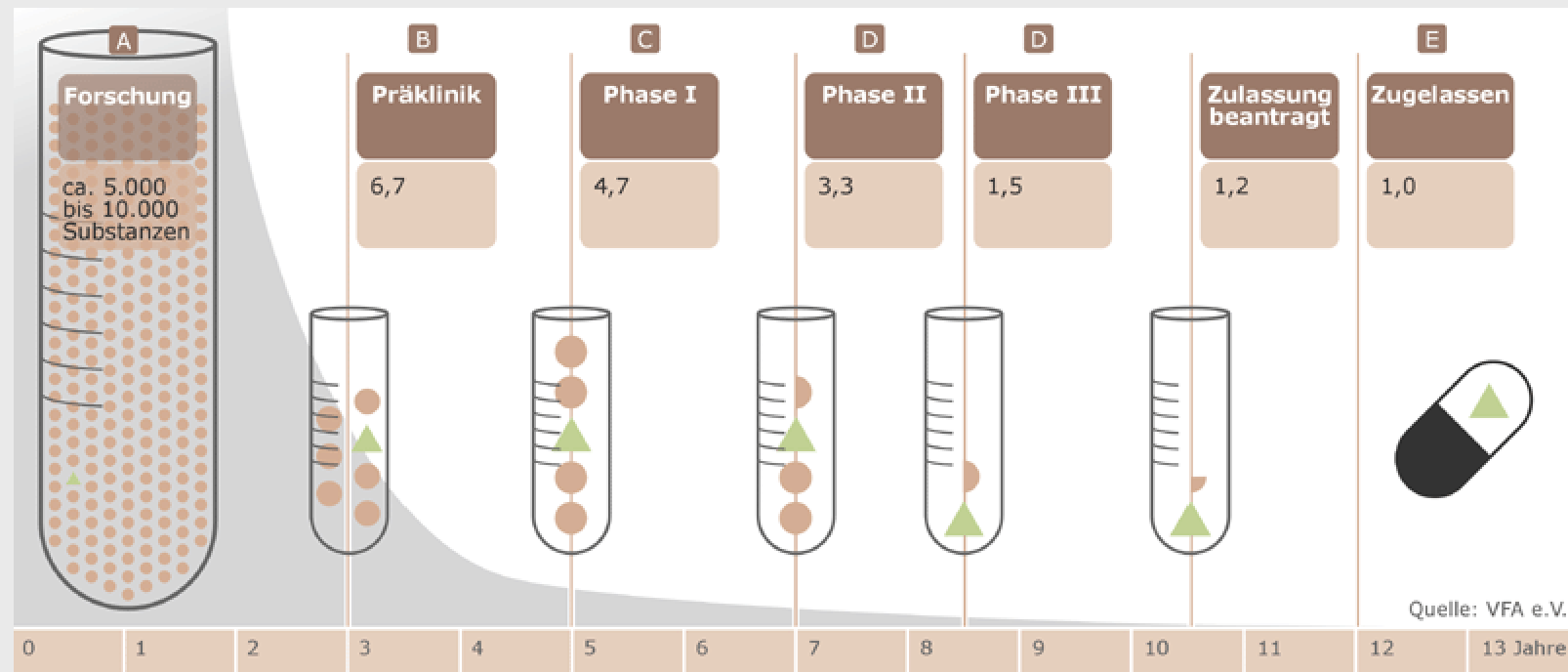
Technology monitoring (4)



From: Kai Nagel, „Strategische Patentanalyse am Beispiel der Facsimiletechnik“, München 1990

Objectives of the patent search

Technology monitoring (4)



Objectives of the patent search

Search for „expired“ patents (5)

- Maximum patent protection period: 20 years.
Patent protection lapses earlier, if fees are not paid.
- After that, subject of the invention is free and can be copied by anybody.
- Thereby costs in internal R&D („Ratiopharm-Tactic“) can be saved.
- Search in patent databases for patent class and time
- 95% of all patent literature is NOT protected by patent

Objectives of the patent search

Search for legal status (6)

- Legal status of a application is checked
- For example: Is the application still active?
- Did a competitor file an opposition against a patent?
- German Patent Office: <https://dpinfo.dpma.de/>
- European Patent Office: www.epoline.org

Search for Legal status in DPINFO or Epoline

DPINFO (dpinfo.dpma.de)

- Database queries concerning patents, utility patents and design patents
- no registration necessary

Epoline (www.epoline.org)

- Database queries concerning patents
- no registration necessary

Why searching in patent literature? (1)

- Even small innovations are documented (Patent offices are obliged to publish!)
- Tangible Solutions for problems (realisation is full of details)
- Technical topics are regarded as strongly application-oriented
- Market-oriented information

Why searching in patent literature? (2)

- Comprehensive and consistently classified documentation of virtually all areas of technology (IPC-Classification)
- Almost comprehensive geographical coverage (offices are obliged to publish)
- Minor costs for search and acquisition of documents

Information conten of a search

- How do development activities change ?
- Which companies are technology leaders ?
- Which solutions will be practicable in the next years ?
- Which are the most important sales markets for a technical solution?
- Which development- or cooperation partner matches me or my company best?

Where to find patent information ?

- National facilities for patent information
- **Online-databases (Depatisnet, Espacenet, Epoline, Inpadoc, etc.)**
- Commercial databases
- Private investigators



Depatisnet (depatisnet.dpma.de)

- All **german** documents since 1877
- Patent documents of other important countries (USA, Japan, EP, WIPO)
- Beginner- and expert search
- Be careful when searching in abstracts or full text, this search option is not possible for all documents
- complex search queries are possible
- **complete download** and print possible!

Depatisnet – Beginner Search

Einsteigerrecherche

Die folgenden Felder sind alle mit UND verknüpft. Sie müssen mindestens ein Feld ausfüllen.

Recherche formulieren

Veröffentlichungsnummer				DE 4446098 C2 / DE 4446098
Titel		Mikroprozessor		
Anmelder		Schmidt GmbH		
Erfinder		Lisa Müller		
Veröffentlichungsdatum		12.10.1999		
Bibliographische IPC		F17D5/00		
Anmeldedatum		15.05.1998		
Prüfstoff-IPC		A01B1/02		
Suche im Volltext		Fahrrad		

Trefferliste konfigurieren

☒ Veröffentlichungsnummer	☒ Titel	☐ Erfinder	☒ Anmelder
☐ Veröffentlichungsdatum	☐ Anmeldedatum	☐ Prüfstoff-IPC	☐ IPC-Hauptklasse

Trefferlisten-sortierung nach

Treffer/Seite

Country code
Document number
Font code

Depatisnet – expert Search

Complex Search Queries

Truncation

The screenshot displays the Depatisnet search interface. At the top, a 'Formulate search' tab is active. Below it, a 'Search query:' label is followed by a large empty text box. To the right of this box, a green overlay contains three examples of search queries and their results: 'TI=crystal' results in 'crystal', 'TI=crystal?' results in 'crystals, crystal,...', and 'TI=?crystal' results in 'nanocrystals, crystal,...'. Below the search query box is a section titled 'Available fields and w' (partially visible). It contains a list of fields: 'Publication number (PN)', 'Title (TI)', 'Application number (AN)', 'Country of application (AC)', 'Application date (AD)', and 'Application year (AY)'. To the right of this list are three buttons with symbols: a question mark '?' for 'No character or any number of characters', an exclamation mark '!' for 'One character only', and a hash '#' for 'One or no character'. Below these is an 'Operators' section with a row of buttons: 'AND', 'OR', 'NOT', '(', ')', '<=', '>=', '<', '>', '=', '(W)', '(NOTW)', '(#W)', '(#A)', '(P)', '(L)', and '(A)'. Two blue arrows point from the text labels 'Complex Search Queries' and 'Truncation' to the search query box and the truncation buttons, respectively.

TI=crystal Ergebnis: crystal
TI=crystal? Ergebnis: crystals, crystal,...
TI=?crystal Ergebnis: nanocrystals, crystal,...

Publication number (PN)
Title (TI)
Application number (AN)
Country of application (AC)
Application date (AD)
Application year (AY)

? No character or any number of characters
! One character only
One or no character

Operators

AND OR NOT () <= >= < > = (W) (NOTW) (#W) (#A) (P) (L) (A)

Operators

- (W) Finds documents containing the search terms in the specified order with no words between them.
- (NOTW) Finds documents containing the search terms close to each other in the specified order, but not immediately next to each other
- (#W) # defines the number of words at most allowed between the search terms. The order of the search terms defines the order of the words in a text.
- (A) Finds documents containing search terms in any order, with no words between them.
- (#A) # defines the number of words between the search terms. The order of the search terms is not relevant; # may be zero.
- (P) Finds documents containing the search terms within the same paragraph.
- (L) Finds documents containing the terms within the same field.

Espacenet

- Total stock in January 2009: ca. 60 Mio. Patents from over 70 countries;
- easy search structure;
- **Search words in English**
- **no complex queries possible;**
- Full text not searchable;
- Download and print of complete documents (<250 S.) possible!
- **Quick help and interactive tutorial**



Espacenet (ep.espacenet.com)

Advanced Search

1. Database

Select the patent database in which you wish to search:

Database:

2. Search terms

Enter keywords (english)

Keyword(s) in title (in English):		plastic AND bicycle
Keyword(s) in title or abstract (in English):		hair
Publication number:		WO03075629
Application number:		DE19971031696
Priority number:		WO1995US15925
Publication date:		yyyymmdd
Applicant:		Institut Pasteur
Inventor:		Smith
European Classification (ECLA):		F03G7/10
International Patent Classification (IPC):		H03M1/12

SEARCH

CLEAR



IPC (International Patentclassification)

8 Sections

A Human Necessities

B Performing Operations; Transporting

C Chemistry; Metallurgy

D Textiles; Paper

E Fixed Constructions

F Mechanical Engineering; Lighting; Heating; Weapons; Blasting

G Physics

H Electricity



IPC (International Patentclassification)

e. g.

Section B: PERFORMING OPERATIONS; TRANSPORTING

Class B01: PHYSICAL OR CHEMICAL PROCESSES OR APPARATUS IN GENERAL

Subclass B01F: MIXING, e.g. DISSOLVING, EMULSIFYING, DISPERSING

Main group B01F 13/00: Other mixers; Mixing plant, including combinations of dissimilar mixers

Subgroup B01F 13/08: Magnetic mixers

Further information:

<http://www.dpma.de/docs/patent/1/aufbauipc.pdf>

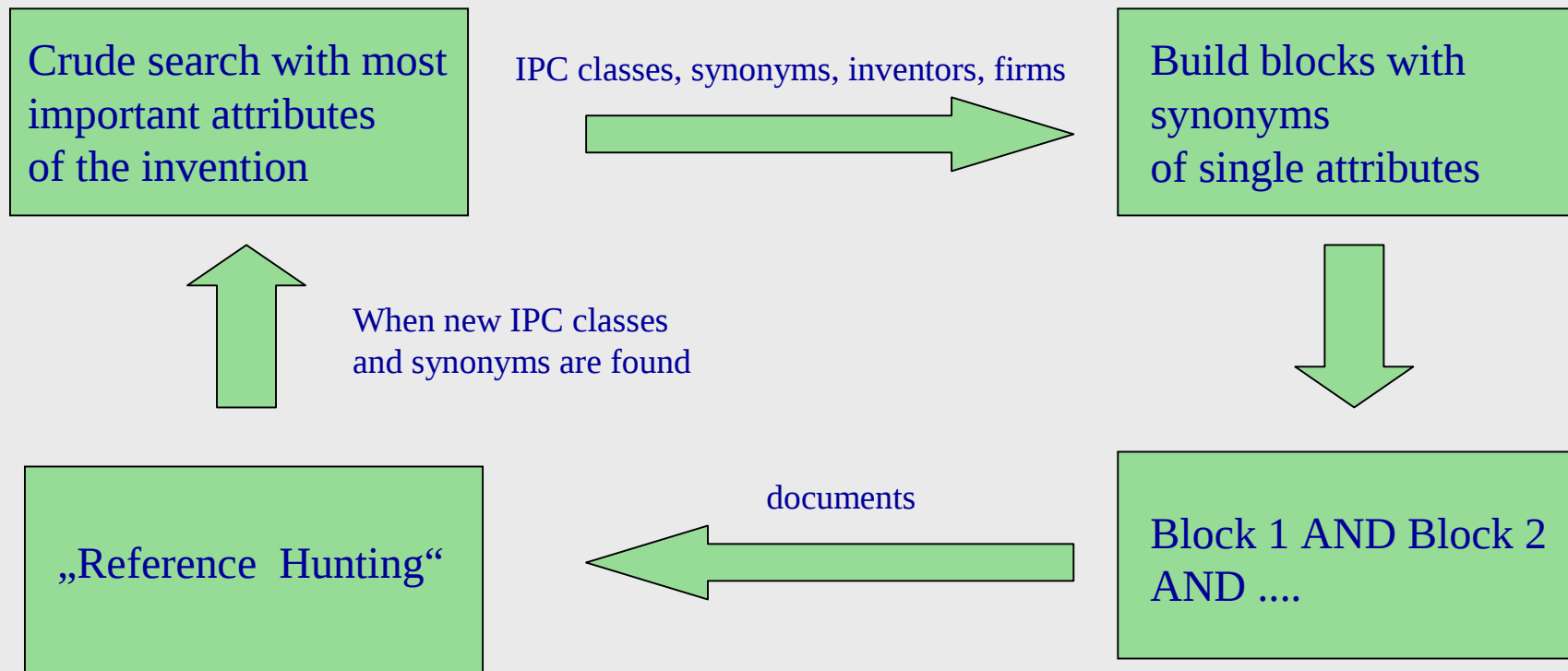


How to conduct a patent search ?

- Compile a keyword list of the attributes of the invention
- Assess IPC-class or IPC-classes
- Make out other possible inventor/applicant
- Search for synonyms and/or possible generic terms of characteristic keywords
- Translate keywords and synonyms in other languages
- Build search-string with operators and truncations
- Look through located documents for references („reference hunting“)
- Document your search !!!



Strategy of a patent search



Example (expert search in depatisnet)

Problem: A search should be accomplished, whether there are
patent protected solutions for exchangeable
brakes for Inline-Skates.



Define IPC- class

Suchbegriff, z.B. Mikroskop, Rollschuhe

Suchsprache:
☒ DE ☐ EN ☐ FR

IPC-Version:
2006.01 (aktuell)

☒ DEKLA-Gruppen

Anzeigeoptionen

Sprache:
☒ DE ☐ EN ☐ FR

maximale Punkthierarchie:
alle

☐ Hierarchie
☒ DEKLA-Gruppen

Sachverzeichnis der Unterklasse

Schlitt- oder Rollschuhe

Schlittschuhe

Rollschuhe

Ski, Schneeschuhe

Ski

Schneeschuhe

Spielplätze, Sportbahnen, Rasenkegel- anlagen, Wasserskianlagen; Abdeckungen dafür

[A63C 1/00](#)
[A63C 3/00](#)
[A63C 17/00](#)
[A63C 5/00](#)
[A63C 11/00](#)
[A63C 13/00](#)
[A63C 19/00](#)

Schlittschuhe ; Zubehör zum Schlittschuhlaufen

☒ [A63C 1/00](#) **Schlittschuhe** (Rollschuhe oder Rollbretter [A63C 17/00](#))

☒ [A63C 1/02](#) . fest an der Sohle des Stiefels angebracht

☒ [A63C 1/04](#) . durch Klammern befestigt

☒ [A63C 1/06](#) . . mit Sohlen- und Absatzflächen, die beide mit Klammern versehen sind

☒ [A63C 1/08](#) . . mit gleichzeitig spannbaren Sohlen- und Absatzklammern

☒ [A63C 1/10](#) . . durch die Bewegung des Fußes festspannbar

☒ [A63C 1/12](#) . . durch seitliches Verschwenken oder Verschieben des Laufeisens oder des ganzen Schlittschuhs festspannbar

☒ [A63C 1/14](#) . . durch Federn festspannbar

Define IPC- class

Internationale Patentklassifikation - Microsoft Internet Explorer bereitgestellt von Uds Referat 8 ITM

Adresse <http://depatisnet.dpma.de/ipc/recherche.do>

IPC-Startseite English

Deutsches Patent- und Markenamt

IPC Verzeichnis IPC Recherche

Suchbegriff, z.B. Mikroskop:
Rollschuhe

Querverweis, z.B. A61C 13/23:

Suchsprache:
☒ DE ☐ EN ☐ FR

IPC-Version:
2006.01 (aktuell)

☒ DEKLA-Gruppen

Anzeigeoptionen

Sprache:
☒ DE ☐ EN ☐ FR

maximale Punkthierarchie:
alle

☐ Hierarchie

☒ DEKLA-Gruppen

☒ Anmerkungen

A63C 17/00	Rollschuhe ; Rollbretter [4]
A63C 17/01	Rollbretter (A63C 17/02-A63C 17/28 haben Vorrang) [4]
A63C 17/02	mit zweipaarig angeordneten Rollen
A63C 17/04	mit anderweitig als in zwei Paaren angeordneten Rollen
A63C 17/06	... einspurige Rollschuhe
A63C 17/06 A	... mit zwei Rollen
A63C 17/06 B	... lenkbar
A63C 17/06 C	... mit mehr als zwei Rollen
A63C 17/08	... Einradrollschuhe
A63C 17/10	mit endlosen Laufbahnen
A63C 17/12	mit Antriebsvorrichtungen
A63C 17/12 A	... mit Segel
A63C 17/14	mit Bremsen, z.B. Zehenbremsen, Rücklaufhemmungen
A63C 17/16	zum Gebrauch auf in besonderer Weise ausgebildeten oder angeordneten Laufbahnen
A63C 17/18	umwandelbar in Eis- oder Schneeschlittschuhe
A63C 17/20	mit feststellbaren Rollen, um mit den Rollschuhen gehen zu können
A63C 17/22	Rollen für Rollschuhe
A63C 17/24	... mit kugelförmigen oder sphärischen Laufflächen
A63C 17/26	mit besonderen zusätzlichen Anordnungen, z.B. Beleuchtungs-, Markierungs- oder

Selection of patent classes relevant for the search

- A63C17/04 with wheels arranged otherwise than in two pairs
- A63C17/06 single-track type
- A63C17/08 single-wheel type
- A63C17/14 with brakes, e.g. toe stoppers, freewheel roller clutches



Usable as three-fold dictionary

Deutsches Patent- und Markenamt  Internationale Patentklassifikation

IPC-Verzeichnis IPC-Recherche IPC-Konkordanz

IPC-Startseite | Drucken | Hilfe | English

Suchbegriff(e), z.B. Schädling? Pflanze?
Rollschuhe

Querverweis, z.B. A61C 13/23:

Suchsprache:
☒ DE ☐ EN ☐ FR

IPC-Ausgabe/Version:
2009.01(aktuell)

☒ DEKLA-Gruppen
☒ Stich- und Schlagworte

Anzeigeoptionen

Sprache:
☒ DE ☒ EN ☒ FR

maximale Punkthierarchie:
alle

☒ Hierarchie
☒ DEKLA-Gruppen
☒ Anmerkungen
☒ Sachverzeichnisse
☒ Stich- und Schlagworte

Ausführen

Treffer

Gesamtzahl Treffer: 12

☐ A63C	Schlittschuhe; Ski; Rollschuhe; Entwurf oder Anordnung von Spielplätzen, Sportbahnen oder dgl. (Geräte für Sportarten im Wasser A63B 31/00 , A63B 33/00 , B63C 11/00 ; Vorrichtungen zum Gleiten auf dem Wasser, z.B. Wasserski B63B 35/79 , B63B 35/81 , B63B 35/83) [5]	SKATES; SKIS; ROLLER SKATES; DESIGN OR LAYOUT OF COURTS, RINKS OR THE LIKE (devices for underwater sports A63B 31/00 , A63B 33/00 , B63C 11/00 ; devices for gliding on water, e.g. water skis, B63B 35/79 , B63B 35/81 , B63B 35/83) [5]	PATINS; SKIS; PATINS À ROULETTES; FORME OU TRACÉ DE TERRAINS, DE PISTES OU SIMILAIRES (dispositifs pour la pratique des sports sous-marins A63B 31/00 , A63B 33/00 , B63C 11/00 ; dispositifs pour glisser sur l'eau, p.ex. skis nautiques, B63B 35/79 , B63B 35/81 , B63B 35/83) [5]
	Sachverzeichnis der Unterklasse SCHLITT- ODER ROLLSCHUHE Schlittschuhe A63C 1/00 , A63C 3/00 Rollschuhe A63C 17/00 SKI, SCHNEESCHUHE Ski A63C 5/00-A63C 11/00 Schneeschuhe A63C 13/00 SPIELPLÄTZE, SPORTBAHNEN, RASENKEGELANLAGEN, WASSERSKIANLAGEN, ABDECKUNGEN DAFÜR [2006.01]	Subclass index SKATES Ice skates A63C 1/00 , A63C 3/00 Roller skates A63C 17/00 SKIS, SNOW SHOES Snow skis A63C 5/00-A63C 11/00 Snow shoes A63C 13/00 PLAYING-COURTS, RINKS, BOWLING GREENS OR AREAS FOR WATER-SKIING, COVERS THEREFOR A63C 19/00	Schéma général PATINS Patins à glace A63C 1/00 , A63C 3/00 Patins à roulettes A63C 17/00 SKIS, RAQUETTES À NEIGE Skis à neige A63C 5/00-A63C 11/00 Raquettes à neige A63C 13/00 TERRAINS DE JEUX, p.ex. POUR JEUX DE BOULES, PATINOIRES OU PLANS D'EAU POUR SKI NAUTIQUE, LEURS COUVERTURES A63C 19/00
	SSW: Sport, Eissport, Rollsport	Catchword(s): sports, ice sports, roller sports	

Determination of search terms

- Synonyms for Skates/roller blades
- Synonyms for the aspect „inline“
- Synonyms for the aspect “braking”
- Synonyms for the aspect „exchangeable“
- Bilingual language search



Investigation of search terms

- english search terms :
 - skate, rollerskate, rollerblade, roller blade, roller shoe
 - in-line, inline, aligned, single-row, single-track, one-track
 - brake, braking, stop
 - Removable, demountable
- german language
 - rollschuh?, einspurig?, einreihig?
 - Brems?, abbrems?, anhalt?, stop?, halt?
 - Abnehmbar, demontierbar, nachrüstbar



Warning !

Some browsers
accept only – instead of /

Crude search

No difference between
lower case or upper case

Expertenrecherche

Recherche formulieren

Suchanfrage:

ICM=(A63c017-04 or a63c017-06 or a63c017-08 OR a63c017-14)

Verfügbare Felder und Platzhalter

Veröffentlichungsnummer (PN)
Titel (TI)
Anmeldenummer (AN)
Anmelde land (AC)
Anmeldedatum (AD)
Anmeldejahr (AY)

? kein oder beliebig viele Zeichen
! genau ein Zeichen
ein oder kein Zeichen

Operatoren

UND ODER NICHT () <= >= < > = (W) (NOTW) (#W) (#A) (P) (L) (A)

Trefferliste konfigurieren

☒ Veröffentlichungsnummer ☒ Titel ☐ Erfinder ☐ Anmelder
☐ Veröffentlichungsdatum ☐ Anmeldedatum ☐ Prüfstoff-IPC ☐ IPC-Hauptklasse

Trefferlistensortierung nach

1. result

Trefferliste

Suchanfrage:

ICM=(A63c017-04 or a63c017-06 or a63c017-08 OR a63c017-14)

Neue Suche (verfeinert)

TREFFERLISTE: TREFFER: 500 (GESAMTTREFFER: 3465) ANGEZEIGTE TREFFERLISTE HERUNTERLADEN				
Nr.	Veröffentlichungs-Nummer ▲	Titel	Anzeige PDF	Familien-Recherche
1	AU002003288984A1	[EN] FOOT MOVABLE MECHANISM AND BRAKE IN SKATING		Suchen
2	AU002003263280A1	[EN] SOLE PLATE FOR SKATE		Suchen
3	AU002003250642A1	[EN] FOUR WHEEL MECHANICAL BRAKE SYSTEM FOR INLINE SKATES		Suchen
4	AU002003235914A1	[EN] ROLLER SKATE		Suchen
5	AU002003234071A1	[EN] A ROLLER SKATE WITH IN-LINE WHEELS		Suchen
6	AU002003221232A1	[EN] MULTIFUNCTIONAL SKATEBOARD		Suchen
7	AU00200349177A1	[EN] SKATEBOARD BRAKING SYSTEM		Suchen
8	AU000200217618A	[] ROLLER SKATE PROVIDED WITH A BRAKE		Suchen
9	AU000200189462A	[] BRAKE ARRANGEMENT FOR SPORTS EQUIPMENT		Suchen
10	AU000200187355A	[] IMPROVED TRUCK FOR SKATEBOARD		Suchen
11	AU000200180224A	[] IN-LINE SKATE		Suchen
12	AU000200040877A	[] In-line skating device of roller skate		Suchen
13	AU000009108191A	[EN] SKATE WITH ALIGNED WHEELS		Suchen
14	AU000009051191A	[EN] A FOOT TRANSPORT DEVICE		Suchen



Detailed search

Trefferliste

Suchanfrage:

ICM=(a63c017-04 or a63c017-06 or a63c017-08 or a63c017-14) and bi=(skate or rollerskate or rollerblade or (roller and blade) or (roller and shoe) or rollschuh? or einspurig? or einreihig?) and bi=(in-line or inline or aligned or single-row or single-track or one-track or rollschuh? or einspurig? or einreihig?) and bi=(Removable or demountable or abnehmbar)

Neue Suche (verfeinert)

TREFFERLISTE: TREFFER: 44 (GESAMTTREFFER: 44) [ANGEZEIGTE TREFFERLISTE HERUNTERLADEN](#)

Nr.	Veröffentlichungs-Nummer ▲	Titel	Anzeige PDF	Familien-Recherche
1	CA000002287829A1	[EN] IN-LINE ROLLER SKATE WITH SLOTTED BOOT/FRAME INTERFACE		Suchen
2	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
3	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
4	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
5	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
6	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
7	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
8	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
9	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
10	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
11	DE000029911330U1	[DE] Rollenanzordnung für einen Inline-Rollerskater		Suchen

Blockbildung
ICM=.... AND Block 1 AND
Block 2 AND Block 3

„Reference hunting“

BUNDESREPUBLIK DEUTSCHLAND
DEUTSCHES PATENT- UND MARKENAMT

Patentschrift
DE 197 03 023 C 2

Int. Cl.⁸
A 63 C 17/14
A 63 C 17/06
A 43 B 7/26
G 01 L 6/00

Aktenzeichen: 197 03 023.8-15
Anmeldetag: 28. 1. 97
Offenlegungstag: 30. 7. 98
Veröffentlichungstag der Patenterteilung: 20. 6. 99

Innerhalb von 3 Monaten nach Veröffentlichung der Erteilung kann Einspruch erhoben werden

Patentinhaber:
Strothmann, Achim, 37120 Bovenden, DE

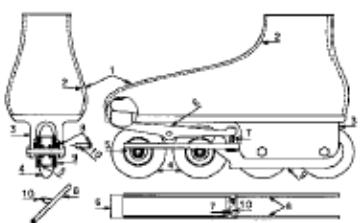
Erfinder:
Strothmann, Achim, 37120 Bovenden, DE;
Strothmann, Thomas, 46134 Mellenhorst, DE

Für die Beurteilung der Patentfähigkeit in Betracht
geogene Druckschriften:

DE	1 95 25 573 C1
DE	94 19 948 U1
US	56 08 346
US	54 03 021
US	52 80 930
US	52 36 058
US	51 43 387
WO	93 20 912 A1

Bremsvorrichtung für Inline-Skates

Bremsvorrichtung für Inline-Skates, mit einem an einem Schuh (1) befestigten Lagerblock (3) in welchem Rollen (4) über ihre Rollflächen gelagert sind, dadurch gekennzeichnet, daß durch Verdrehen eines im Lagerblock (3) gelagerten Stabes (8), der einen rechteckigen oder elliptischen Querschnitt besitzt, eine Bremschiene (9) axial an die Rollen (4) angedrückt wird, um eine Bremswirkung zu erzielen.



Further important documents !

Family search

Trefferliste

Suchanfrage:
DE000010009141C2

TREFFERLISTE: TREFFER: 3 (GESAMTTREFFER: 3) ANGEZEIGTE TREFFERLISTE HERUNTERLADEN

Nr.	<u>Veröffentlichungs-Nummer</u> ▲	<u>Titel</u>	Anzeige PDF	Familien-Recherche
1	DE000020023217U1	[DE] Bremsvorrichtung für Inlineskates		Suchen
2	DE000010009141C2	[DE] Bremsvorrichtung für Inlineskates		Suchen
3	DE000010009141A1	[DE] Bremsvorrichtung für Inlineskates		Suchen

Patent Application
Publication

Patent specification

Utility model

More questions concerning patent search

Axel Koch
Dagmar Vössing
Gerd Schneider

phone +49 (0)681/302-6340
email info@pva-saarland.de

or
Support of the DPMA
Support@bdr.de



Searching in patent databases

Outline

- Objectives of the patent search
- What types of searches are there?
- Where to find patent-based information?
- How to do a patent search (with examples)?
- Exercises on patent search

Objectives of the patent search

Novelty Search (1)

- Specific search about a topic of a planned R&D activity, which might produce patents
- Aim: A search creating no hits so subsequent R&D activities can be started
- Risk: no hits might mean there is no relevant literature but it is also possible that the search items were wrong or too selective

Objectives of the patent search Competitor search (2)

- Applications and patents of other companies or research facilities in my field of research
- What does the competitor do and how?

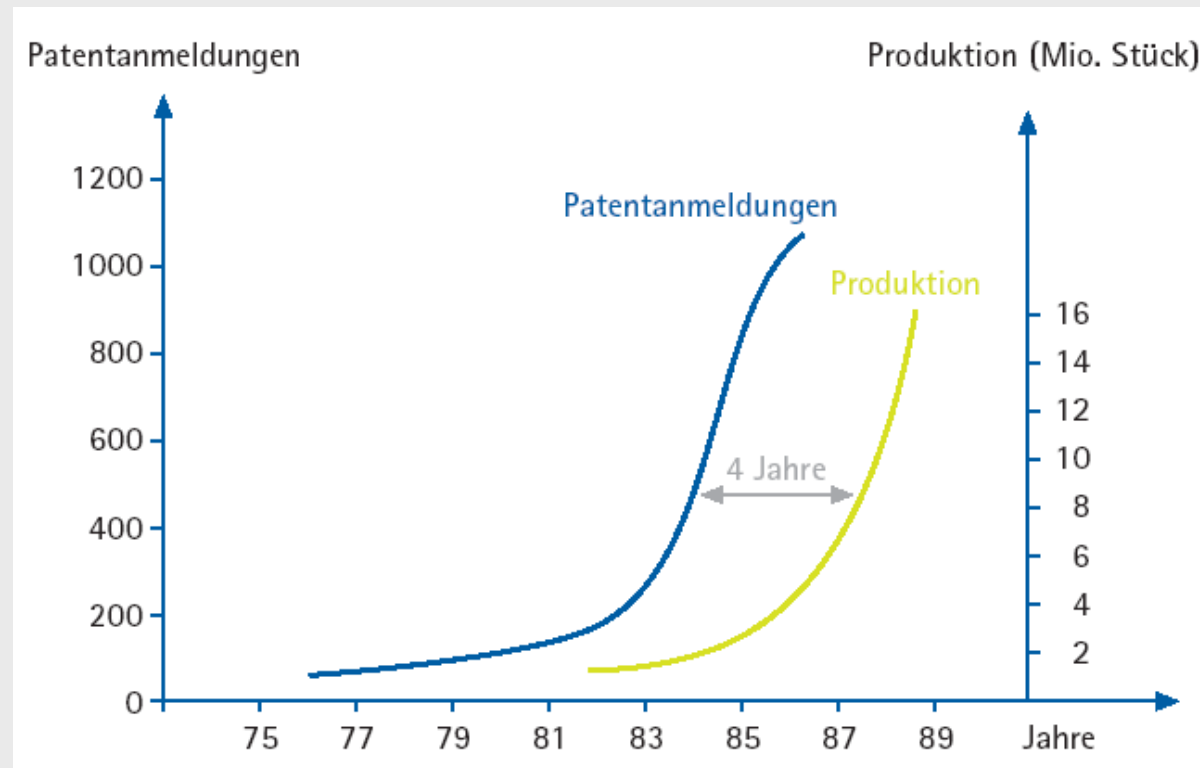
Objectives of the patent search Technology search (3)

- Search for additional or advantageous technical solutions
- Problem based approach $\Rightarrow$ looking for specific solutions



Objectives of the patent search

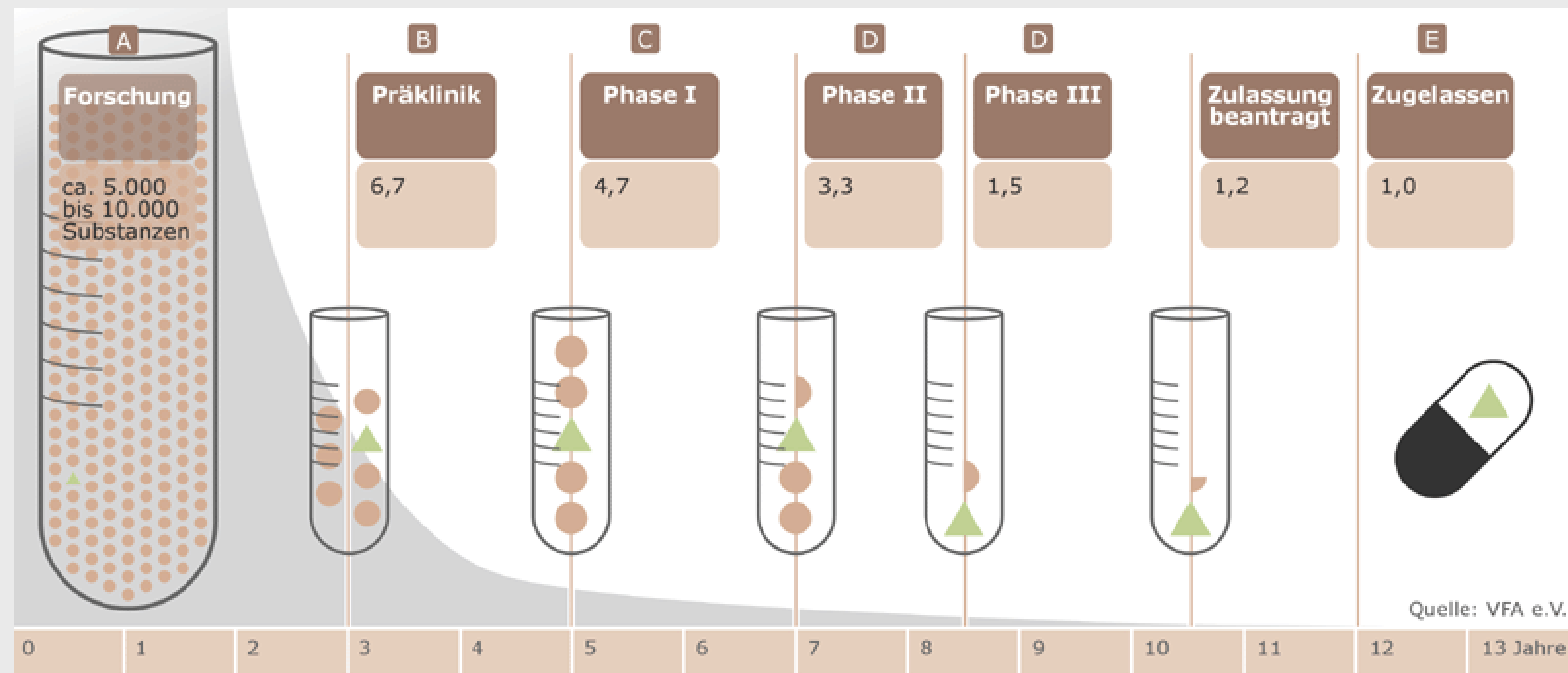
Technology monitoring (4)



From: Kai Nagel, „Strategische Patentanalyse am Beispiel der Facsimiletechnik“, München 1990

Objectives of the patent search

Technology monitoring (4)



Objectives of the patent search

Search for „expired“ patents (5)

- Maximum patent protection period: 20 years.
Patent protection lapses earlier, if fees are not paid.
- After that, subject of the invention is free and can be copied by anybody.
- Thereby costs in internal R&D („Ratiopharm-Tactic“) can be saved.
- Search in patent databases for patent class and time
- 95% of all patent literature is NOT protected by patents

Objectives of the patent search

Search for legal status (6)

- Legal status of an application is checked
- For example: Is the application still active?
- Did a competitor file an opposition against a patent?
- German Patent Office: <https://dpinfo.dpma.de/>
- European Patent Office: www.epoline.org

Search for Legal status in DPINFO or Epoline

DPINFO (dpinfo.dpma.de)

- Database queries concerning patents, utility patents and design patents
- no registration necessary

Epoline (www.epoline.org)

- Database queries concerning patents
- no registration necessary

Why searching in patent literature? (1)

- Even small innovations are documented (Patent offices are obliged to publish!)
- Tangible Solutions for problems (realisation is full of details)
- Technical topics are regarded as strongly application-oriented
- Market-oriented information

Why searching in patent literature? (2)

- Comprehensive and consistently classified documentation of virtually all areas of technology (IPC-Classification)
- Almost comprehensive geographical coverage (offices are obliged to publish)
- Minor costs for search and acquisition of documents

Informative content of a search

- How do development activities change ?
- Which companies are technology leaders ?
- Which solutions will be realized in the next years ?
- Which are the most important sales markets for a technical solution?
- Which development- or cooperation partner fits well for my company?



Where to find patent information ?

- National centres for patent information
- **Online-databases (Depatisnet, Espacenet, Epoline, Inpadoc, etc.)**
- Commercial databases
- Private researchers

Depatisnet (depatisnet.dpma.de)

- All **German** documents since 1877
- Patent documents of other important countries (USA, Japan, EP, WIPO)
- Beginner and expert search
- Be careful when searching in abstracts or full texts, this search option is not possible for all documents
- **complex search queries** are possible
- **complete download** and print possible!



Depatisnet – Beginner Search

Country code
Document number
Font code

Einsteigerrecherche

Die folgenden Felder sind alle mit UND verknüpft. Sie müssen mindestens ein Feld ausfüllen.

Recherche formulieren

Veröffentlichungsnummer				DE 4446098 C2 / DE 4446098
Titel		Mikroprozessor		
Anmelder		Schmidt GmbH		
Erfinder		Lisa Müller		
Veröffentlichungsdatum		12.10.1999		
Bibliographische IPC		F17D5/00		
Anmeldedatum		15.05.1998		
Prüfstoff-IPC		A01B1/02		
Suche im Volltext		Fahrrad		

Trefferliste konfigurieren

☒ Veröffentlichungsnummer	☒ Titel	☐ Erfinder	☒ Anmelder
☐ Veröffentlichungsdatum	☐ Anmeldedatum	☐ Prüfstoff-IPC	☐ IPC-Hauptklasse

Trefferlisten-sortierung nach

Treffer/Seite

Depatisnet – expert Search

Complex Search Queries

Truncation

The screenshot shows the Depatisnet search interface. At the top, there is a 'Formulate search' section with a 'Search query:' label and a text input field. Below this is a section titled 'Available fields and w' (likely 'weights') containing a list of fields: Publication number (PN), Title (TI), Application number (AN), Country of application (AC), Application date (AD), and Application year (AY). To the right of this list are three buttons: '? No character or any number of characters', '! One character only', and '# One or no character'. Below these is an 'Operators' section with a row of buttons: AND, OR, NOT, (,), <=, >=, <, >, =, (W), (NOTW), (#W), (#A), (P), (L), and (A). A green box on the right side of the interface contains the following text:

TI=crystal Ergebnis: crystal
TI=crystal? Ergebnis: crystals, crystal,...
TI=?crystal Ergebnis: nanocrystals, crystal,...

Arrows point from the 'Complex Search Queries' label to the search query input field and from the 'Truncation' label to the '?' button in the 'Available fields and w' section.

Operators

- (W) Finds documents containing the search terms in the specified order with no words between them.
- (NOTW) Finds documents containing the search terms close to each other in the specified order, but not immediately next to each other
- (#W) # defines the number of words at most allowed between the search terms. The order of the search terms defines the order of the words in a text.
- (A) Finds documents containing search terms in any order, with no words between them.
- (#A) # defines the number of words between the search terms. The order of the search terms is not relevant; # may be zero.
- (P) Finds documents containing the search terms within the same paragraph.
- (L) Finds documents containing the terms within the same field.

Espacenet

- Total stock in January 2009: ca. 60 Mio. patents from over 70 countries;
- easy search structure;
- **Search words in English**
- **no complex queries possible;**
- Full text not searchable;
- Download and print of complete documents (<250 S.) possible!
- **Quick help and interactive tutorial**



Espacenet (ep.espacenet.com)

Advanced Search

1. Database

Select the patent database in which you wish to search:

Database:

2. Search terms

Enter keywords (english)

Keyword(s) in title (in English):		plastic AND bicycle
Keyword(s) in title or abstract (in English):		hair
Publication number:		WO03075629
Application number:		DE19971031696
Priority number:		WO1995US15925
Publication date:		yyyymmdd
Applicant:		Institut Pasteur
Inventor:		Smith
European Classification (ECLA):		F03G7/10
International Patent Classification (IPC):		H03M1/12

SEARCH

CLEAR

IPC (International Patent Classification)

8 Sections

A Human Necessities

B Performing Operations; Transporting

C Chemistry; Metallurgy

D Textiles; Paper

E Fixed Constructions

F Mechanical Engineering; Lighting; Heating; Weapons; Blasting

G Physics

H Electricity



IPC (International Patent Classification)

e. g.

Section B: PERFORMING OPERATIONS; TRANSPORTING

Class B01: PHYSICAL OR CHEMICAL PROCESSES OR APPARATUS IN GENERAL

Subclass B01F: MIXING, e.g. DISSOLVING, EMULSIFYING, DISPERSING

Main group B01F 13/00: Other mixers; Mixing plant, including combinations of dissimilar mixers

Subgroup B01F 13/08: Magnetic mixers

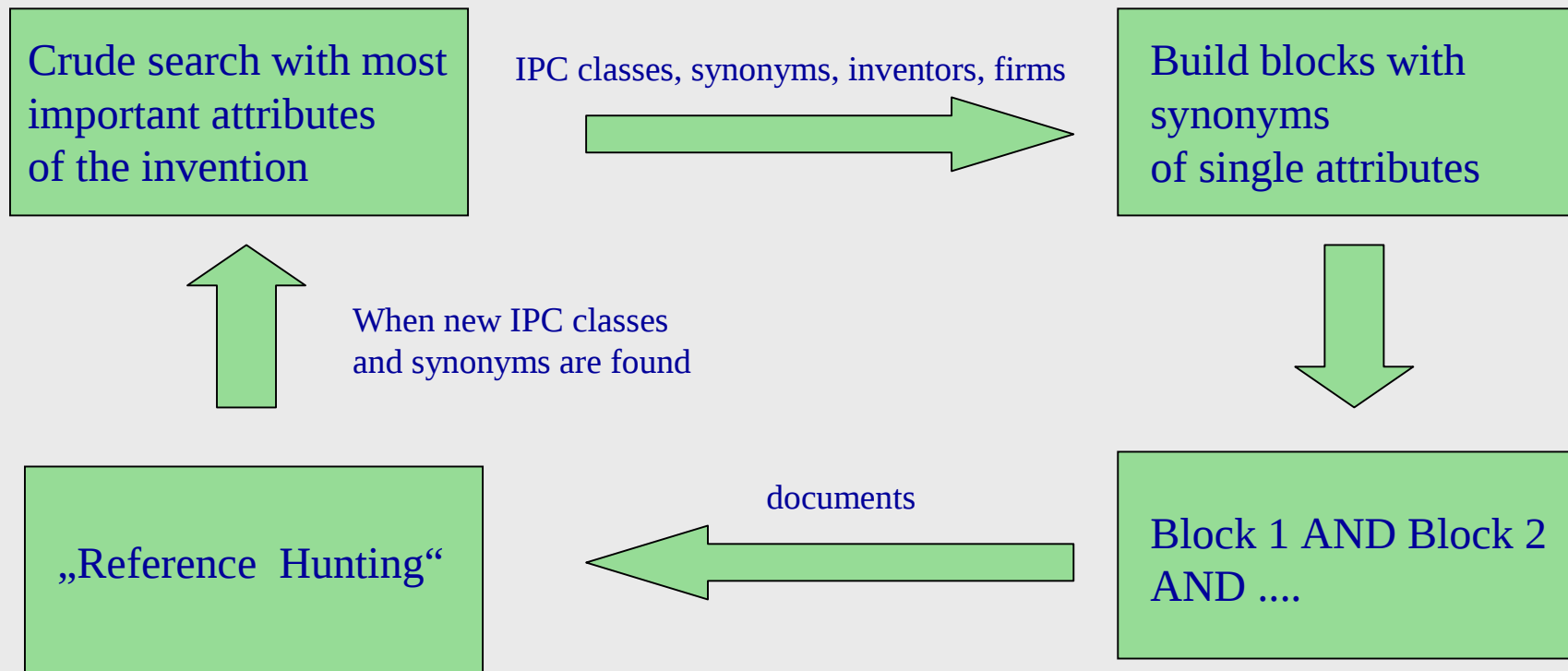
Further information:

<http://www.dpma.de/docs/patent/1/aufbauipc.pdf>

How to conduct a patent search ?

- Compile a keyword list of the attributes of the invention
- Assess IPC-class or IPC-classes
- Search other possible inventor/applicant
- Search for synonyms and/or possible generic terms of characteristic keywords
- Translate keywords and synonyms in other languages
- Build search string with operators and truncations
- Look through located documents for references („reference hunting“)
- Make a documentation of your search !!!

Strategy of a patent search



Example (expert search in depatisnet)

Problem: A search should be accomplished, whether there are
patent protected solutions for exchangeable
brakes for Inline-Skates.



Define IPC- class

Deutsches Patent- und Markenamt

Internationale Patentklassifikation

IPC Verzeichnis | IPC Recherche

Suchbegriff, z.B. Mikroskop:
Rollschuhe

Querverweis, z.B. A61C 13/23:

Suchsprache:
☒ DE ☐ EN ☐ FR

IPC-Version:
2006.01 (aktuell)

☒ DEKLA-Gruppen

Anzeigeoptionen

Sprache:
☒ DE ☐ EN ☐ FR

maximale Punkthierarchie:
alle

☐ Hierarchie
☒ DEKLA-Gruppen

Sachverzeichnis der Unterklasse

Schlitt- oder Rollschuhe

Schlittschuhe

Rollschuhe

Ski, Schneeschuhe

Ski

Schneeschuhe

Spielfläche, Sportbahnen, Rasenkegel- anlagen, Wasserskianlagen;
Abdeckungen dafür

[A63C 1/00](#)
[A63C 3/00](#)
[A63C 17/00](#)
[A63C 5/00](#)
[A63C 11/00](#)
[A63C 13/00](#)
[A63C 19/00](#)

Schlittschuhe ; Zubehör zum Schlittschuhlaufen

☒	A63C 1/00	Schlittschuhe (Rollschuhe oder Rollbretter A63C 17/00)
☒	A63C 1/02	. fest an der Sohle des Stiefels angebracht
☒	A63C 1/04	. durch Klammern befestigt
☒	A63C 1/06	. . mit Sohlen- und Absatzflächen, die beide mit Klammern versehen sind
☒	A63C 1/08	. . mit gleichzeitig spannbaren Sohlen- und Absatzklammern
☒	A63C 1/10	. . durch die Bewegung des Fußes festspannbar
☒	A63C 1/12	. . durch seitliches Verschwenken oder Verschieben des Laufeisens oder des ganzen Schlittschuhs festspannbar
☒	A63C 1/14	. . durch Federn festspannbar

Define IPC- class

Internationale Patentklassifikation - Microsoft Internet Explorer bereitgestellt von Uds Referat 8 ITM

Adresse <http://depatisnet.dpma.de/ipc/recherche.do>

IPC-Startseite English

Deutsches Patent- und Markenamt

IPC Verzeichnis IPC Recherche

Suchbegriff, z.B. Mikroskop:
Rollschuhe

Querverweis, z.B. A61C 13/23:

Suchsprache:
☒ DE ☐ EN ☐ FR

IPC-Version:
2006.01 (aktuell)

☒ DEKLA-Gruppen

Anzeigeoptionen

Sprache:
☒ DE ☐ EN ☐ FR

maximale Punkthierarchie:
alle

☐ Hierarchie

☒ DEKLA-Gruppen

☒ Anmerkungen

A63C 17/00	Rollschuhe ; Rollbretter [4]
A63C 17/01	Rollbretter (A63C 17/02-A63C 17/28 haben Vorrang) [4]
A63C 17/02	mit zweipaarig angeordneten Rollen
A63C 17/04	mit anderweitig als in zwei Paaren angeordneten Rollen
A63C 17/06	... einspurige Rollschuhe
A63C 17/06 A	... mit zwei Rollen
A63C 17/06 B	... lenkbar
A63C 17/06 C	... mit mehr als zwei Rollen
A63C 17/08	... Einradrollschuhe
A63C 17/10	mit endlosen Laufbahnen
A63C 17/12	mit Antriebsvorrichtungen
A63C 17/12 A	... mit Segel
A63C 17/14	mit Bremsen, z.B. Zehenbremsen, Rücklaufhemmungen
A63C 17/16	zum Gebrauch auf in besonderer Weise ausgebildeten oder angeordneten Laufbahnen
A63C 17/18	umwandelbar in Eis- oder Schneeschlittschuhe
A63C 17/20	mit feststellbaren Rollen, um mit den Rollschuhen gehen zu können
A63C 17/22	Rollen für Rollschuhe
A63C 17/24	... mit kugelförmigen oder sphärischen Laufflächen
A63C 17/26	mit besonderen zusätzlichen Anordnungen, z.B. Beleuchtungs-, Markierungs- oder

Selection of patent classes relevant for the search

- A63C17/04 with wheels arranged otherwise than in two pairs
- A63C17/06 single-track type
- A63C17/08 single-wheel type
- A63C17/14 with brakes, e.g. toe stoppers, freewheel roller clutches



Usable as threefold dictionary

IPC-Startseite | Drucken | Hilfe | English

Internationale Patentklassifikation

Deutsches Patent- und Markenamt

IPC-Verzeichnis
IPC-Recherche
IPC-Konkordanz

Suchbegriff(e), z.B. Schädling? Pflanze:

Querverweis, z.B. A61C 13/23:

Suchsprache:
☒ DE
 ☐ EN
 ☐ FR
 IPC-Ausgabe/Version:

☒ DEKLA-Gruppen
☒ Stich- und Schlagworte

Anzeigeoptionen

Sprache:
☒ DE
 ☒ EN
 ☒ FR
 maximale Punkthierarchie:

☒ Hierarchie
☒ DEKLA-Gruppen
☒ Anmerkungen
☒ Sachverzeichnisse
☒ Stich- und Schlagworte

Ausführen

Treffer

Gesamtzahl Treffer: 12

☐	A63C	Schlittschuhe; Ski; Rollschuhe; Entwurf oder Anordnung von Spielplätzen, Sportbahnen oder dgl. (Geräte für Sportarten im Wasser A63B 31/00 , A63B 33/00 , B63C 11/00 ; Vorrichtungen zum Gleiten auf dem Wasser, z.B. Wasserski B63B 35/79 , B63B 35/81 , B63B 35/83) [5]	SKATES; SKIS; ROLLER SKATES; DESIGN OR LAYOUT OF COURTS, RINKS OR THE LIKE (devices for underwater sports A63B 31/00 , A63B 33/00 , B63C 11/00 ; devices for gliding on water, e.g. water skis, B63B 35/79 , B63B 35/81 , B63B 35/83) [5]
		<u>Sachverzeichnis der Unterklasse</u> SCHLITT- ODER ROLLSCHUHE Schlittschuhe A63C 1/00 , A63C 3/00 Rollschuhe A63C 17/00 SKI, SCHNEESCHUHE Ski A63C 5/00-A63C 11/00 Schneeschuhe A63C 13/00 SPIELPLÄTZE, SPORTBAHNEN, RASENKEGELANLAGEN, WASSERSKI-ANLAGEN; ABDECKUNGEN DAFÜR [2006.01]	<u>Subclass index</u> SKATES Ice skates A63C 1/00 , A63C 3/00 Roller skates A63C 17/00 SKIS, SNOW SHOES Snow skis A63C 5/00-A63C 11/00 Snow shoes A63C 13/00 A63C 19/00 PLAYING-COURTS, RINKS, BOWLING GREENS OR AREAS FOR WATER-SKIING, COVERS THEREFOR
			<u>Schéma général</u> PATINS Patins à glace A63C 1/00 , A63C 3/00 Patins à roulettes A63C 17/00 SKIS, RAQUETTES À NEIGE Skis à neige A63C 5/00-A63C 11/00 Raquettes à neige A63C 13/00 TERRAINS DE JEUX, p.ex. POUR JEUX DE BOULES, PATINOIRES OU PLANS D'EAU POUR SKI NAUTIQUE, LEURS COUVERTURES
		SSW: Sport, Eissport, Rollsport	Catchword(s): sports, ice sports, roller sports

Determination of search terms

- Synonyms for Skates/roller blades
- Synonyms for the aspect „inline“
- Synonyms for the aspect “braking”
- Synonyms for the aspect „exchangeable“
- Bilingual language search



Investigation of search terms

- english search terms :
 - skate, rollerskate, rollerblade, roller blade, roller shoe
 - in-line, inline, aligned, single-row, single-track, one-track
 - brake, braking, stop
 - Removable, demountable
- german language
 - rollschuh?, einspurig?, einreihig?
 - Brems?, abbrems?, anhalt?, stop?, halt?
 - Abnehmbar, demontierbar, nachrüstbar



Warning !

Some browsers
accept only – instead of /

Crude search

No difference between
lower case or upper case

Expertenrecherche

Recherche formulieren

Suchanfrage:

ICM=(A63c017-04 or a63c017-06 or a63c017-08 OR a63c017-14)

Verfügbare Felder und Platzhalter

Veröffentlichungsnummer (PN)
Titel (TI)
Anmeldenummer (AN)
Anmelde land (AC)
Anmeldedatum (AD)
Anmeldejahr (AY)

? kein oder beliebig viele Zeichen
! genau ein Zeichen
ein oder kein Zeichen

Operatoren

UND ODER NICHT () <= >= < > = (W) (NOTW) (#W) (#A) (P) (L) (A)

Trefferliste konfigurieren

☒ Veröffentlichungsnummer ☒ Titel ☐ Erfinder ☐ Anmelder
☐ Veröffentlichungsdatum ☐ Anmeldedatum ☐ Prüfstoff-IPC ☐ IPC-Hauptklasse

Trefferlistensortierung nach

1. result

Trefferliste

Suchanfrage:

ICM=(A63c017-04 or a63c017-06 or a63c017-08 OR a63c017-14)

Neue Suche (verfeinert)

TREFFERLISTE: TREFFER: 500 (GESAMTTREFFER: 3465) ANGEZEIGTE TREFFERLISTE HERUNTERLADEN				
Nr.	Veröffentlichungs-Nummer ▲	Titel	Anzeige PDF	Familien-Recherche
1	AU002003288984A1	[EN] FOOT MOVABLE MECHANISM AND BRAKE IN SKATING		Suchen
2	AU002003263280A1	[EN] SOLE PLATE FOR SKATE		Suchen
3	AU002003250642A1	[EN] FOUR WHEEL MECHANICAL BRAKE SYSTEM FOR INLINE SKATES		Suchen
4	AU002003235914A1	[EN] ROLLER SKATE		Suchen
5	AU002003234071A1	[EN] A ROLLER SKATE WITH IN-LINE WHEELS		Suchen
6	AU002003221232A1	[EN] MULTIFUNCTIONAL SKATEBOARD		Suchen
7	AU00200349177A1	[EN] SKATEBOARD BRAKING SYSTEM		Suchen
8	AU000200217618A	[] ROLLER SKATE PROVIDED WITH A BRAKE		Suchen
9	AU000200189462A	[] BRAKE ARRANGEMENT FOR SPORTS EQUIPMENT		Suchen
10	AU000200187355A	[] IMPROVED TRUCK FOR SKATEBOARD		Suchen
11	AU000200180224A	[] IN-LINE SKATE		Suchen
12	AU000200040877A	[] In-line skating device of roller skate		Suchen
13	AU000009108191A	[EN] SKATE WITH ALIGNED WHEELS		Suchen
14	AU000009051191A	[EN] A FOOT TRANSPORT DEVICE		Suchen



Detailed search

Trefferliste

Suchanfrage:

ICM=(a63c017-04 or a63c017-06 or a63c017-08 or a63c017-14) and bi=(skate or rollerskate or rollerblade or (roller and blade) or (roller and shoe) or rollschuh? or einspurig? or einreihig?) and bi=(in-line or inline or aligned or single-row or single-track or one-track or rollschuh? or einspurig? or einreihig?) and bi=(Removable or demountable or abnehmbar)

Neue Suche (verfeinert)

TREFFERLISTE: TREFFER: 44 (GESAMTTREFFER: 44) [ANGEZEIGTE TREFFERLISTE HERUNTERLADEN](#)

Nr.	Veröffentlichungs-Nummer ▲	Titel	Anzeige PDF	Familien-Recherche
1	CA000002287829A1	[EN] IN-LINE ROLLER SKATE WITH SLOTTED BOOT/FRAME INTERFACE		Suchen
2	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
3	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
4	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
5	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
6	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
7	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
8	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
9	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
10	CA000002287829A1	[EN] CARRIER FOR AN IN-LINE ROLLER SKATE		Suchen
11	DE000029911330U1	[DE] Rollenanzordnung für einen Inline-Rollerskater		Suchen

Blockbildung
ICM=.... AND Block 1 AND
Block 2 AND Block 3

„Reference hunting“

BUNDESREPUBLIK DEUTSCHLAND
DEUTSCHES PATENT- UND MARKENAMT

Patentschrift
DE 197 03 023 C 2

Int. Cl.⁸
A 63 C 17/14
A 63 C 17/06
A 43 B 7/26
G 01 L 6/00

① Aktenzeichen: 197 03 023.8-15
② Anmeldetag: 28. 1. 97
③ Offenlegungstag: 30. 7. 98
④ Veröffentlichungstag der Patenterteilung: 20. 6. 99

Innerhalb von 3 Monaten nach Veröffentlichung der Erteilung kann Einspruch erhoben werden

⑤ Patentinhaber:
Strothmann, Achim, 37120 Bovenden, DE

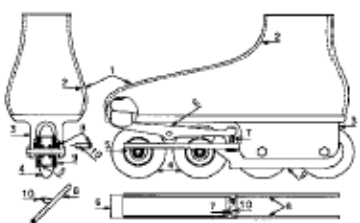
⑥ Erfinder:
Strothmann, Achim, 37120 Bovenden, DE;
Strothmann, Thomas, 46134 Mellenhorst, DE

⑦ Für die Beurteilung der Patentfähigkeit in Betracht gezogene Druckschriften:

DE	1 96 25 573 C1
DE	94 19 948 U1
US	56 08 346
US	54 03 021
US	52 80 930
US	52 36 058
US	51 43 387
WO	93 20 912 A1

Bremsvorrichtung für Inline-Skates

⑧ Bremsvorrichtung für Inline-Skates, mit einem an einem Schuh (1) befestigten Lagerblock (3) in welchem Rollen (4) über ihre Rollflächen gelagert sind, dadurch gekennzeichnet, daß durch Verdrehen eines im Lagerblock (3) gelagerten Stabes (8), der einen rechteckigen oder elliptischen Querschnitt besitzt, eine Bremschiene (9) axial an die Rollen (4) angedrückt wird, um eine Bremswirkung zu erzielen.



Further important documents !

Family search

Trefferliste

Suchanfrage:
DE000010009141C2

TREFFERLISTE: TREFFER: 3 (GESAMTTREFFER: 3) ANGEZEIGTE TREFFERLISTE HERUNTERLADEN

Nr.	<u>Veröffentlichungs-Nummer</u> ▲	<u>Titel</u>	Anzeige PDF	Familien-Recherche
1	DE000020023217U1	[DE] Bremsvorrichtung für Inlineskates		Suchen
2	DE000010009141C2	[DE] Bremsvorrichtung für Inlineskates		Suchen
3	DE000010009141A1	[DE] Bremsvorrichtung für Inlineskates		Suchen

Patent Application
Publication

Patent specification

Utility model

More questions?

Axel Koch
Dagmar Vössing
Gerd Schneider

phone +49 (0)681/302-6340
email info@pva-saarland.de

Thank you for your attention !!!