

Patents and Trademarks, a source of business opportunities

Frank Verbeke – NV Bekaert SA

CEPIUG 10 YAC – Milan (IT)

1. Bekaert introduction
2. Business Opportunity
3. Background
4. Patent Genetics
5. Trademarks in Patents - Introduction
6. Examples
7. Summary, Conclusion and Q&A

1 - Bekaert in brief (1/5)

- Founded in **1880** by Leo Leander Bekaert in Belgium
- Customers in **120 countries** and in the most diverse industry sectors
- Global manufacturing platform
- Almost **30 000 employees** worldwide
- Combined sales of **€ 4.8 billion** (2017)
- Consolidated sales of € 4.1 billion (2017)
- Listed on Euronext® Brussels



Focus on two core competences (2/5)

Bekaert is active in selected applications based on **two core competences**

- advanced metal transformation
- advanced materials and coatings

Main raw material is **wire rod**

- a steel wire about the thickness of a finger
- in a wide range of compositions and grades

We manufacture all kinds of **wire products**

- by drawing wire rod through dies of diminishing sizes
- subjecting it to heat treatments of various kinds

These wires can be

- bunched into cables and cords
- drawn into ultra-thin fibers
- woven or knitted into cloths
- depending on the application, suitable high technological coatings are applied to steel wires, cords and cables



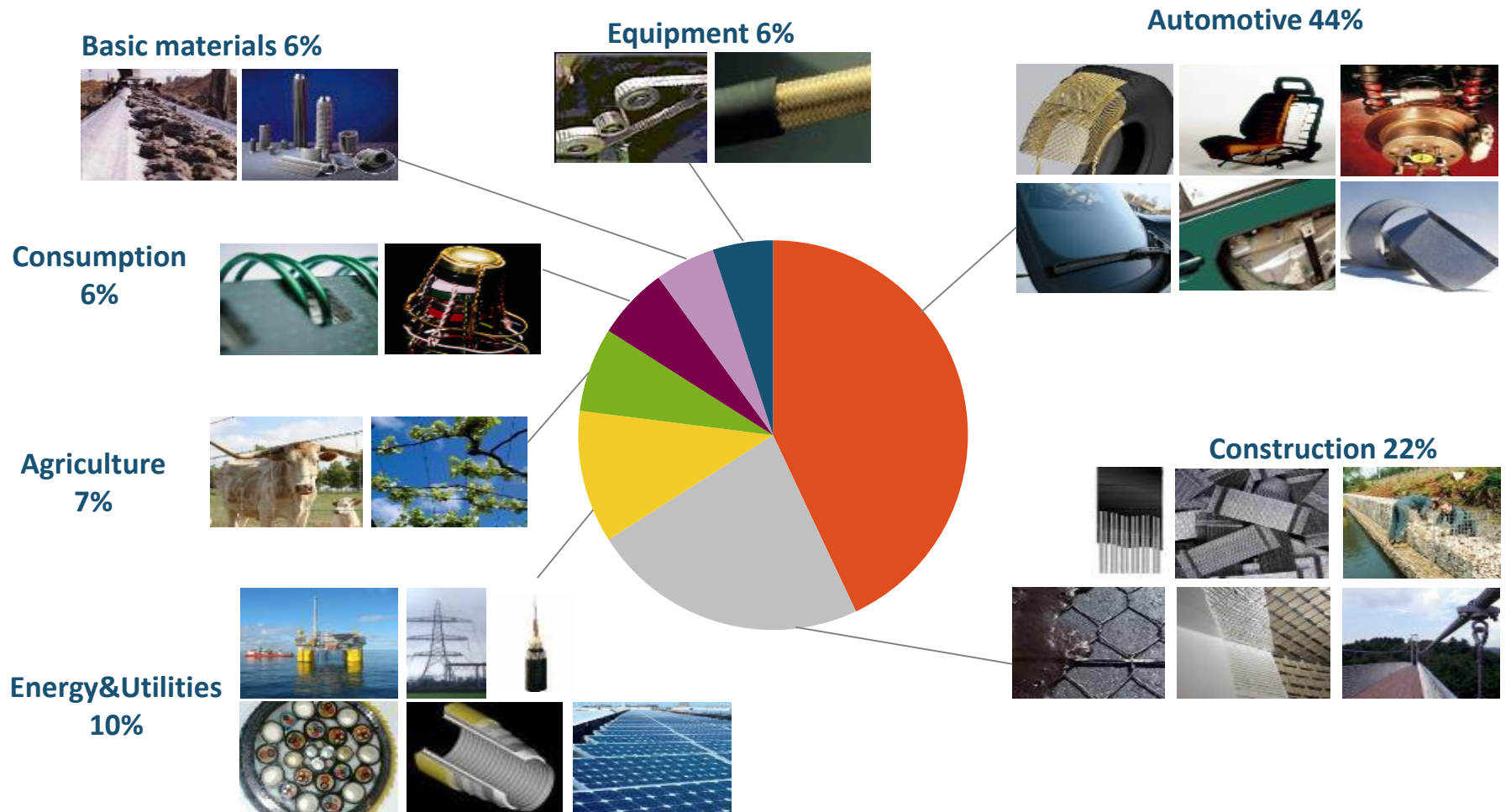
6.5 mm → 1 μm

Ref. A human hair = 50 μm

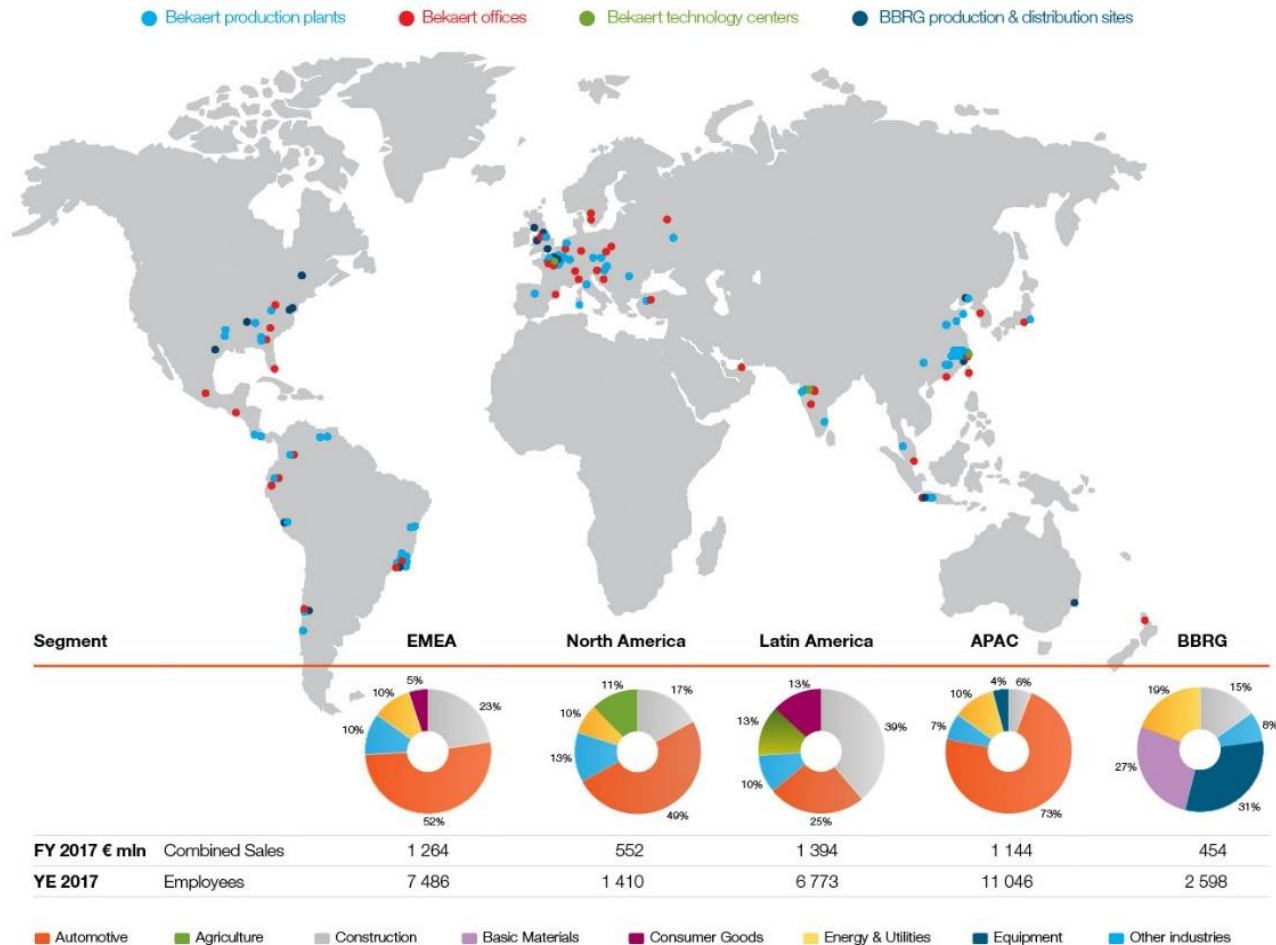
- Every year over **1 billion bottles** of sparkling wine are opened via the muselet made of Bekaert wires
- Nearly **30% of all tires** around the world are reinforced with Bekaert tire cord
- Every year, **8 million m³** concrete is being reinforced with Dramix[®] steel fibers invented by Bekaert
- Bekaert's customers annually use **3.5 million kilometers** of bookbinding wire
- Our sawing wire to cut wafers represents **15 GW** of annual solar energy capacity in the end markets
- Over **8 million** households and industrial infrastructures in Europe are being heated by Bekaert gas burners



Bekaert market leadership in diverse sectors (4/5)



Bekaert global presence (5/5)



‘Business Opportunity ... The opportunity to do business’

This must be seen in it's broadest sence and includes but it's not limited to:

- New applications of existing products
- New products of existing applications
- New markets
- New clients/customers
- New (joint) developments, improvements
- ...





DilbertCartoonist@gmail.com



© 2009 Scott Adams, Inc./Dist. by UFS, Inc.



Initial goal of the 'exercise' was to find an “**alternative**” sourcing of **business opportunities** using prior art data, more specific Patent Information.

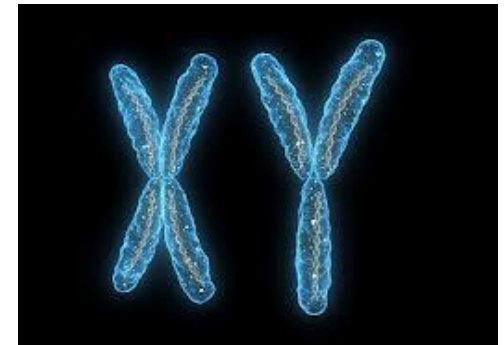
2 approaches were used: '**Patent Genetics**' & '**Trademarks in Patents**'

Why?

- Rather “Simple”
- Not too expensive in data & time
- Increases Awareness & Visibility
- Because you can!

4 - Patent Genetics (1/2)

- Citation analysis on X and Y citations of a (company) portfolio.
- These are closely related to past, current or future activities.
- They are either similar or equivalent in subject and often solve the same or similar problem.
- Any tool that allows you to search on X and Y citations is suitable.
E.g. Patbase, Orbit.com, STN, ... but also free tools like CCD, Google, ...
- Opportunities with this approach can be:
 - ✓ Collaboration opportunities;
 - ✓ New customers;
 - ✓ Competitor identification;
 - ✓



Problems:

- Applications are often already known as documents are directly linked to very similar subjects.
- There will be little or no surprises if you have good market awareness...
- One could expand the citation analysis to ANY kind of citations, BUT it generates more data and it is not always more relevant.
- The assignee/company has to have applications/patents filed at a patent authority that publishes it's search reports!
- Problems of 'ownership' with respect of the dataset buildup.

5 - Trademarks in Patent Literature



- A **patent** is an exclusive rights granted by a sovereign state to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an invention. An invention is a solution to a specific technological problem and is a **product** or a **process**. (cfr Wikipedia)
- A **trademark** is a recognizable sign or expression which identifies **products** or **services** of a particular source from those of others. (cfr Wikipedia)



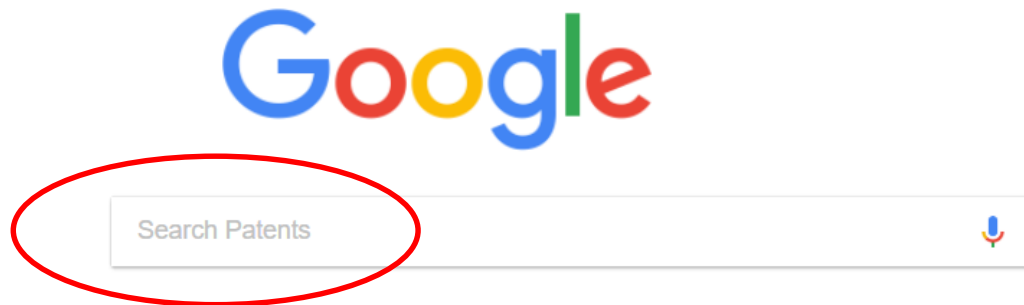
Protecting same things with different rights



Identifying the same with different rights

Question is: Are trademarks commonly mentioned in Patents? ... YES!

- In Patbase **468576** patent families have at least 1 member mentioning the term 'trademark' in the full text.; **126555** patent families when reduced to Earliest Publication Date (EPD) > 2010!
- **630114** hits in Patentscope (WIPO)
- **585787** hits in Patentinspiration
- **4945601** hits in Google Patents (<https://patents.google.com/>)
OR
1790000 hits in Google Patents (<https://www.google.com/?tbm=pts>)



What about other languages beside English (checked in Patbase)?

- [ES] Marca registrada : **4440** (*)
- [FR] Marque déposée : **6791** (*)
- [DE] Eingetragene Marke : **2341** (*)
- [JP] 登録商標 : **14791** (*) (**)
- [CN] 注册商标 : **17794** (*)
- [KR] 등록상표 : **27487** (*)
- ...



(*) : *Unique patent families; no 'trademark' mention in one or more family members*

(**) : *limited to Title, Abstract and Claims*

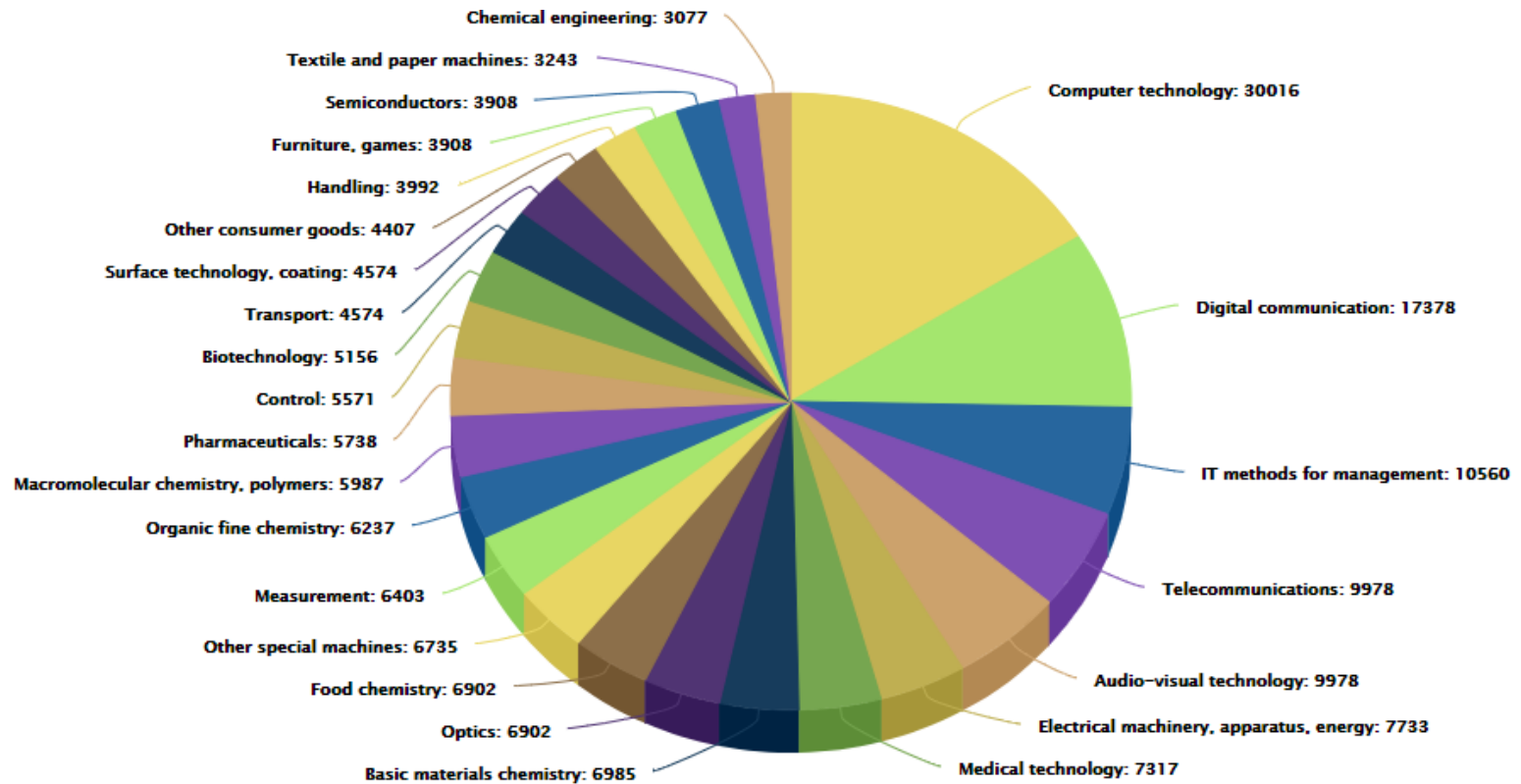
Lost in translation? E.g. ES2506096 vs US2010168343

poliuretanos termoplásticos. Polímeros homogéneos, tales como plastómeros y elastómeros olefínicos, copolímeros con base de etileno y propileno (por ejemplo polímeros disponibles con la **marca registrada VERSIFY™**) disponibles en The Dow Chemical Company y VISTAMAXX™ disponible en Exxon Mobil, también pueden ser útiles como componentes en mezclas que comprenden los interpolímeros funcionalizados.

(SBS and SEBS), and thermoplastic polyurethanes. Homogeneous polymers, such as olefin plastomers and elastomers, ethylene and propylene-based copolymers (for example polymers available under the **trade designation VERSIFY™**) available from The Dow Chemical Company, and VISTAMAXX™, available from ExxonMobil, can also be useful as components in blends comprising the functionalized interpolymers.

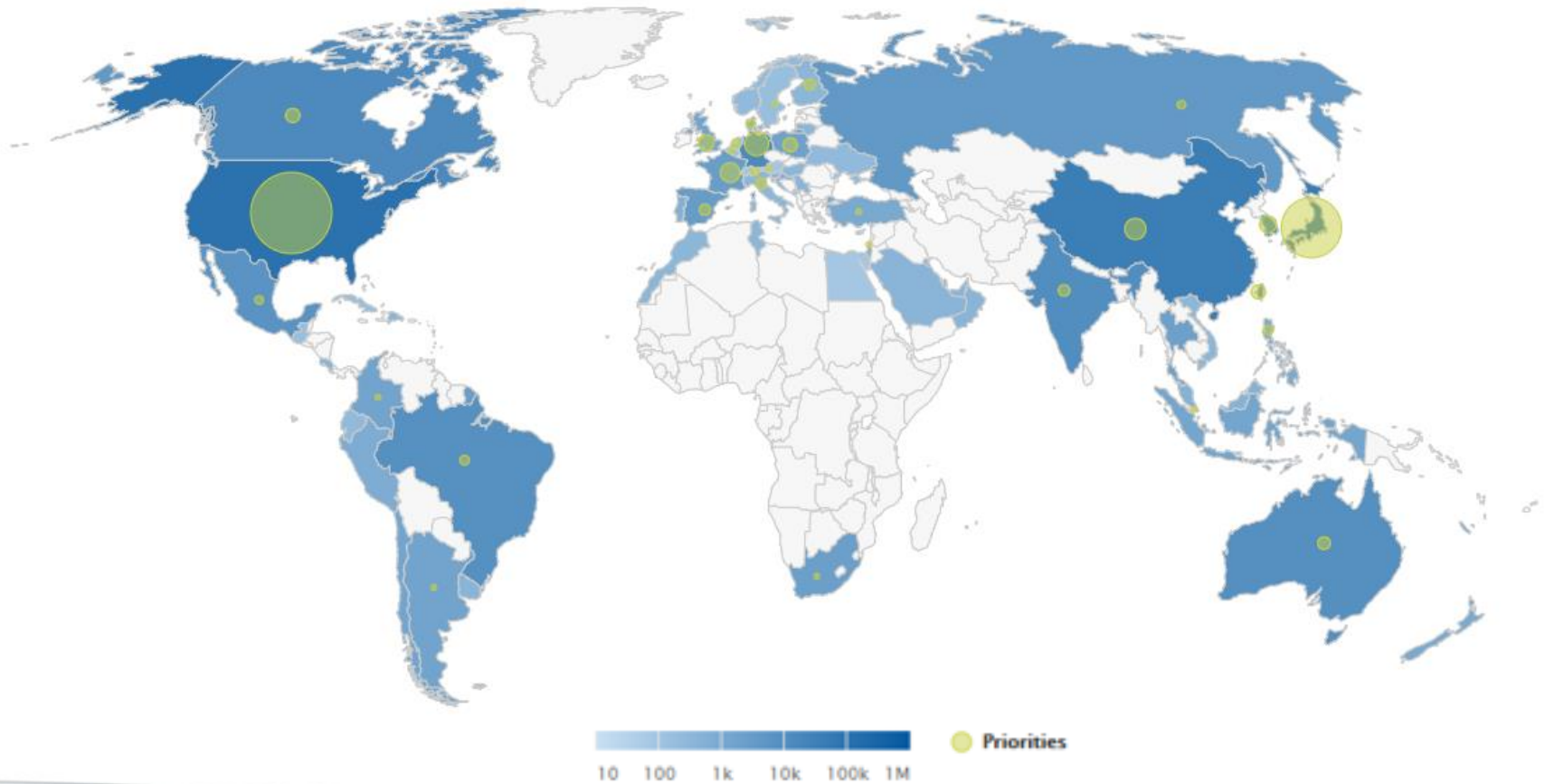
The term ‘trade designation’ (**23209** patent families) results in **19743** unique patent families with no ‘trademark’ mention in one or more family members

Top 25 CPC fields by Patent Families since 2010 (EPD)



Although the distribution is uneven, no CPC field is “unaffected”...

Geographic spread of the term ‘trademark’ used in Patent Literature since EPD 2010 and with respect to priority country.



Some general remarks:

- You can use company names and/or product trademarks/brands (Registered or unregistered).
- The approach is applicable to your own portfolio BUT also to one or more competitor portfolios!
- You can use active and inactive trademarks.
- The use of trademarks in patents is not limited to one or more authorities and/or languages.
- Remark: Over time the usage TM in Patent applications has only increased! “Why”, is a topic on itself...

So what do you need?

- Full text (preferably a family based) database (Patbase, Orbit.com, Patentscope, PatentInspiration, Google Patents, Espacenet, ...)
- TM database to link to assignee/company with TM e.g.
 - USPTO – TESS (Trademark Electronic Search System) <http://tmsearch.uspto.gov/>
 - Benelux merkenregister www.boip.int/en/trademarks-register
 - WIPO – Romarin www.wipo.int/madrid/monitor/en/
 - WIPO – Global Brand Database www.wipo.int/branddb/en/
 - OHIM – TMView www.tmdn.org/tmview/welcome
- Company name(s) & structure
- Input from sales & marketing people e.g. known brands & trademarks
- ... “Some time”

CASE 1 - Bekaert

- A. Patent assignee 'Bekaert' has **1541** hits
- B. Forward citations: **9691** hits
- C. Backward citations: **9433** hits
- D. Full text search for 'Bekaert': **856** hits

D NOT (A OR B OR C) results in **435** hits



General remarks:

- All examples were searched in Patbase
- Numbers represent patent families

(19) **United States**

(12) **Patent Application Publication**
Strobbe

(10) **Pub. No.: US 2014/0227769 A1**
(43) **Pub. Date: Aug. 14, 2014**

(54) **DEVICE AND METHOD FOR INDUSTRIAL CULTIVATION OF CELLS**

Publication Classification

(75) Inventor: **Per Strobbe**, Holte (DK)
(73) Assignee: **STROBBE TECH A/S**, Holte (DK)
(21) Appl. No.: **13/806,402**
(22) PCT Filed: **Jun. 21, 2011**
(86) PCT No.: **PCT/EP2011/060303**
§ 371 (c)(1),
(2), (4) Date: **Mar. 4, 2014**

(51) **Int. Cl.**
CI2M 1/12 (2006.01)
(52) **U.S. Cl.**
CPC **CI2M 25/18** (2013.01); *CI2M 25/14* (2013.01)
USPC **435/287.1**; 435/299.1

(30) **Foreign Application Priority Data**

Jun. 23, 2010 (DK) DK20100000548
Jun. 23, 2010 (DK) DK20100000549

[0243] Metal fibre with thickness of 1-50 µm are further suitable as raw materials for the here presented invention, design and manufacturing methods. Either drawn fibres or fibres cut or planed from solid materials into fibres such as the product Bekinor or Bekinox available from the Belgium company **Bekaert**. Typically the fibres are alloyed from at least elements like; ferrum, chromium, nickel, aluminium and preferably small parts of rare earth elements. Other selections from the elements and alloys may serve the task of attracting

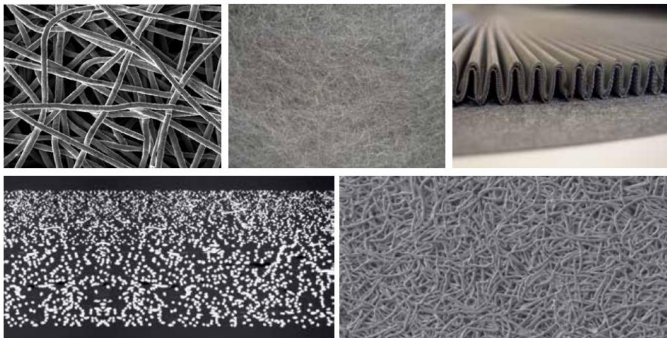
Remark: no mention of the term ‘trademark’ or equivalent!

Trademarks in Patent Literature – Examples (3/9)

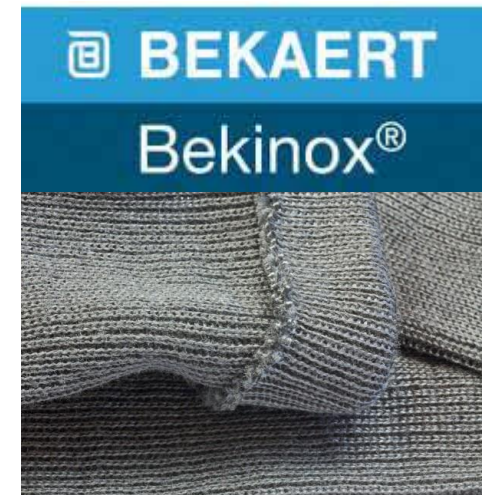
Trademark	# Hits full text	Unique hits (*)
Bekinox	98	67
Bekipor	69	50
Dramix	70	50

(*) Not assigned to Bekaert, in Forward or Backward citations.

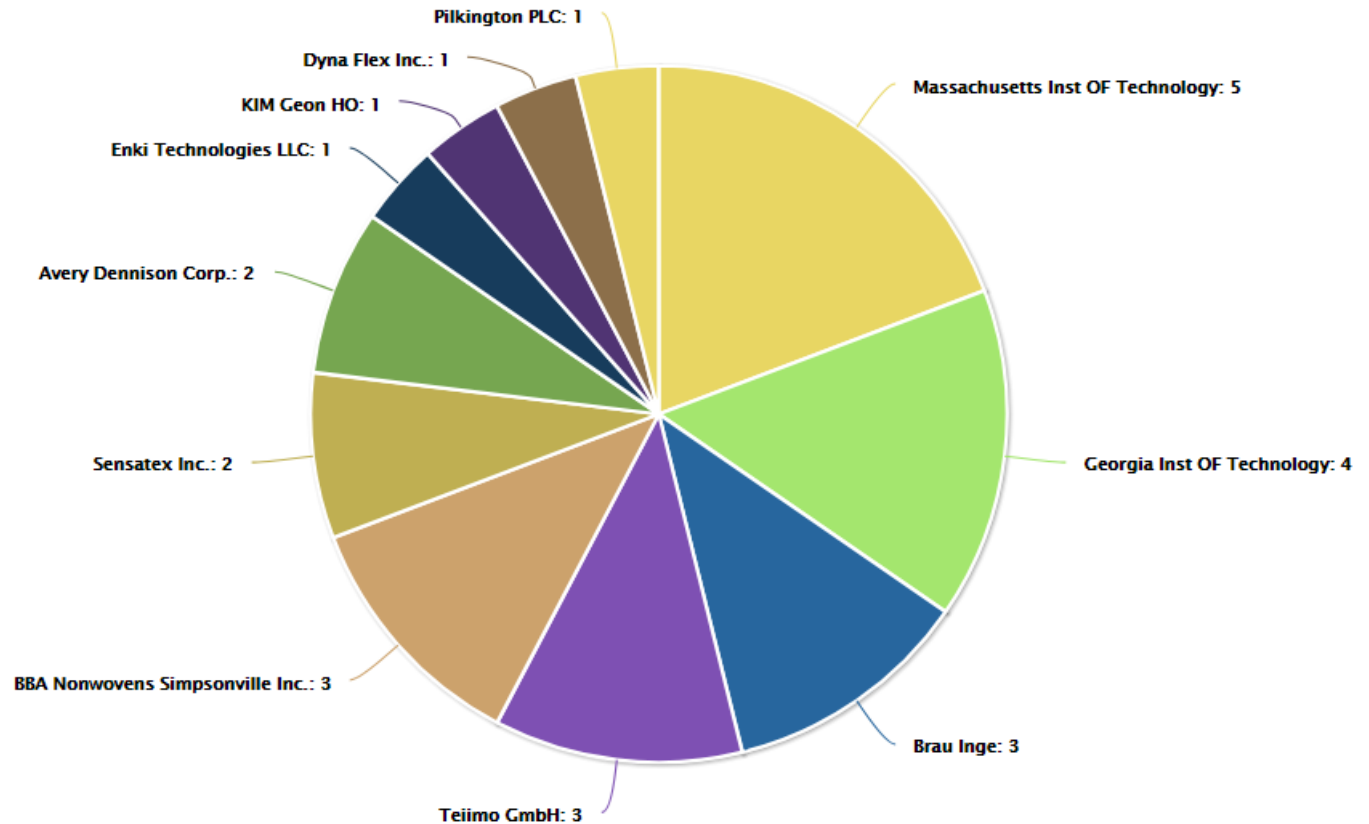
Bekipor[®] metal fiber media



Dramix[®]



Bekintex is part of the 'Bekaert Group'. Patent assignee 'Bekintex' has no results in the databases, but full text search for 'Bekintex' results in **15** unique hits with **11** different assignees!



CASE 2 - Shell

- A. Patent assignee 'Shell' has **33980** hits
- B. Forward citations: **2486** hits
- C. Backward citations: **9869** hits
- D. Full text search for 'Shell': **>100.000** hits ☹️
- E. Full text search for 'Shell' NEAR 'trademark': **2632** hits



E NOT (A OR B OR C) results in **2399** hits



(11) **EP 2 558 308 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
11.06.2014 Bulletin 2014/24

(21) Application number: **11717839.2**

(22) Date of filing: **14.04.2011**

(51) Int Cl.:
C08K 3/36 ^(2006.01) **C08K 5/01** ^(2006.01)
C08K 5/548 ^(2006.01) **C08L 9/00** ^(2006.01)
C08L 9/06 ^(2006.01) **C08L 9/100** ^(2006.01)
C08L 93/04 ^(2006.01) **B60C 1/00** ^(2006.01)
C08L 21/00 ^(2006.01)

(86) International application number:
PCT/US2011/032516

(87) International publication number:
WO 2011/130525 (20.10.2011 Gazette 2011/42)

(54) **TIRE RUBBER COMPRISING MODIFIED TALL OIL PITCH**

REIFENKAUTSCHUK MIT MODIFIZIERTEM TALLÖLTEER

CAOUTCHOUC POUR PNEU COMPRENANT DU BRAI D'HUILE DE PIN MODIFIÉ

[0054] DAE oil (**Tudalen** 65, supplied by Hansen& Rosenthal) is used as the standard oil and all the others are compared against it. TDAE (**Vicatec** 500, supplied by Hansen& Rosenthal), MES (**Vicatec** 200, supplied by Hansen& Rosenthal), RAE (Flavex 595, supplied by Shell) and the **Lubrirob** TOD 18.80 (refined high oleic sunflower oil, available from Novance) oils were selected for comparison. **Tudalen** and **Vivatec** are registered trademarks of Hansen& Rosenthal, Germany. **Flavex** is a registered trademark of Shell, UK/The Netherlands.

Trademarks in Patent Literature – Examples (7/9)

Table 3 - Physical Property Summary of compounds containing commercial oils and pitch from Plant A and Plant B, resp, as well as a Fatty acid FA7002 and a Distilled Tall oil D40LR, formalized to the reference DAE oil.

	DAE	RAE	TDAE	MES	Lubrirob	pitch		FA7002	D40 LR
	Tudalene 65	Flavex 595P	Vivatec 500	Vivatec 200	TOD 1880	Plant A	Plant B		
Mooney	100	99	91	98	100	91	78	72	94
Min Torque	100	92	84	88	86	99	96	89	105
Max torque	100	98	104	102	115	88	85	87	89
T90	100	95	91	91	88	100	104	140	147
Hardness	100	96	101	100	102	96	97	99	98
Tensile	100	107	103	91	101	118	118	115	112
Elongation	100	115	98	92	116	145	132	152	156
M100	100	92	106	104	90	71	82	80	79
M200	100	88	107	101	84	72	84	77	73
M300	100	94			89	79	89	79	74

The term 'Flavex' is mentioned in **113** patent families.

111 of them are not assigned to Shell, in Forward or Backward citations!

CASE 3 - Libeltex (TWE Group)

A: Patent assignee 'Libeltex': **17** families

B: Backward citations: **168** families

C: Forward citations: **237** families

D: Full text search for 'Libeltex': **121** families



D NOT (A OR B OR C) results in **116** patent families!

Specific Registered TM references of Libeltex:

- 'Airweb': **10** hits, **9** unique hits not mentioned in A, B, C or D!
- 'Aerofill': **12** hits, **7** unique and not mentioned in A, B, C or D!

Ref. : <https://www.twe-group.com/en/>

CASE 4 – Avantium / Synvina

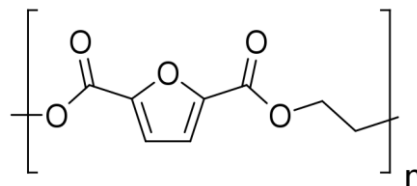
Dutch company 'Avantium' with spinoff 'Synvina' specific for PEF^(*):

- A. Assignee 'Avantium' OR 'Synvina': **163** patent families
- B. Forward citations: **607** hits
- C. Backward citations: **1260** hits
- D. Full text search for 'Avantium' OR 'Synvina': **126** Hits



D NOT (A OR B OR C) results in **104** hits patent families

(*) PEF: Polyethylene-furanoate



Ref: www.avantium.com & www.synvina.com

- Approach is close to the real market
- New or different use, or applications of existing products can be found
- Potential new customers for existing products
- Patents provide information on USP in relation to the trademark.
 - ✓ Possible product optimization/customization
 - ✓ Disclose advantages over competition
 - ✓ ...
- It can be included in different search types and strategies and It works as an alert!
- Easy to use & low cost
- Awareness potential and visibility of the “searcher”

WHAT'S NEXT...

Expand the approach to non Patent Literature e.g. via Google Patents

This presentation comes with no warranty,
but it's worth trying!





 **BEKAERT**

better together