

BIG Patent DATA driven Innovation Logic

a research methodology for automating innovation engineering

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Who benefits?

HR



IP

Professional

Marketing

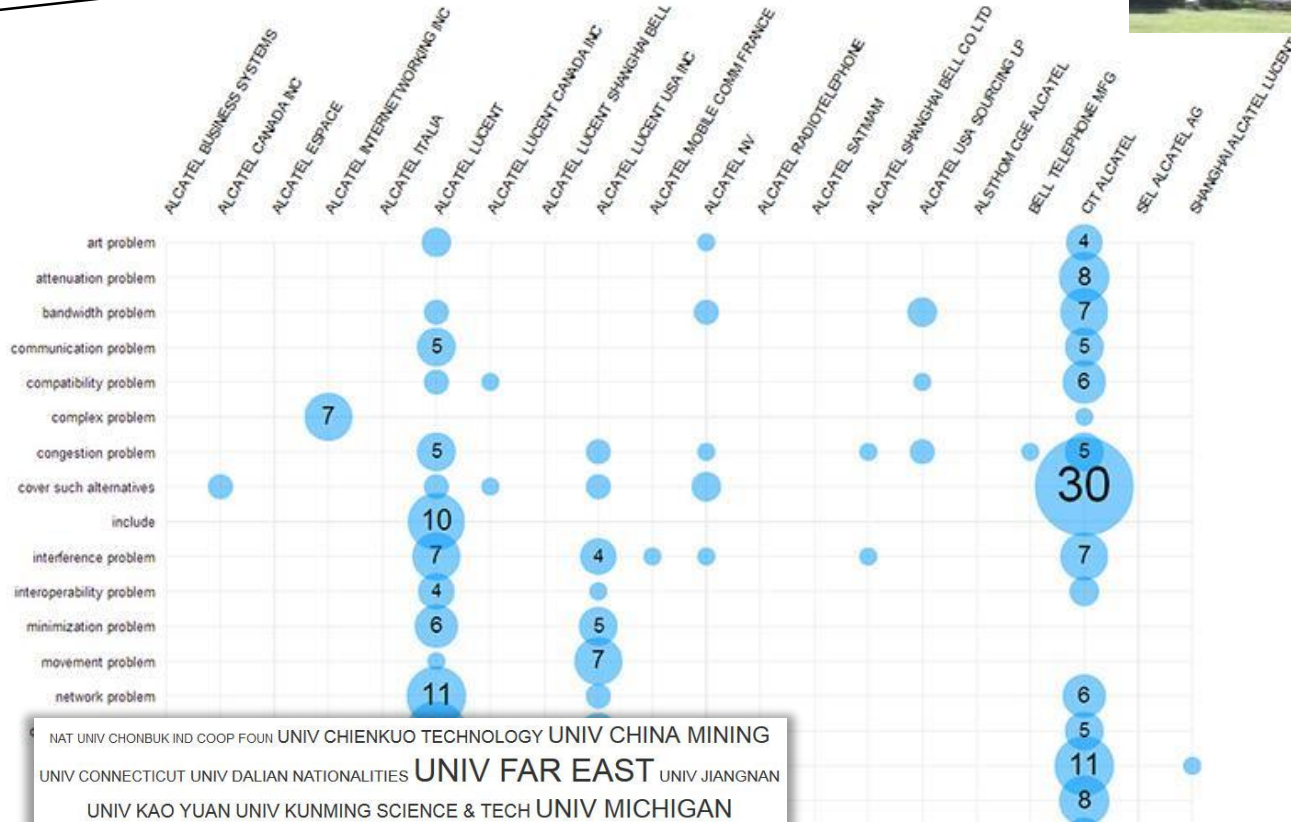


R&D



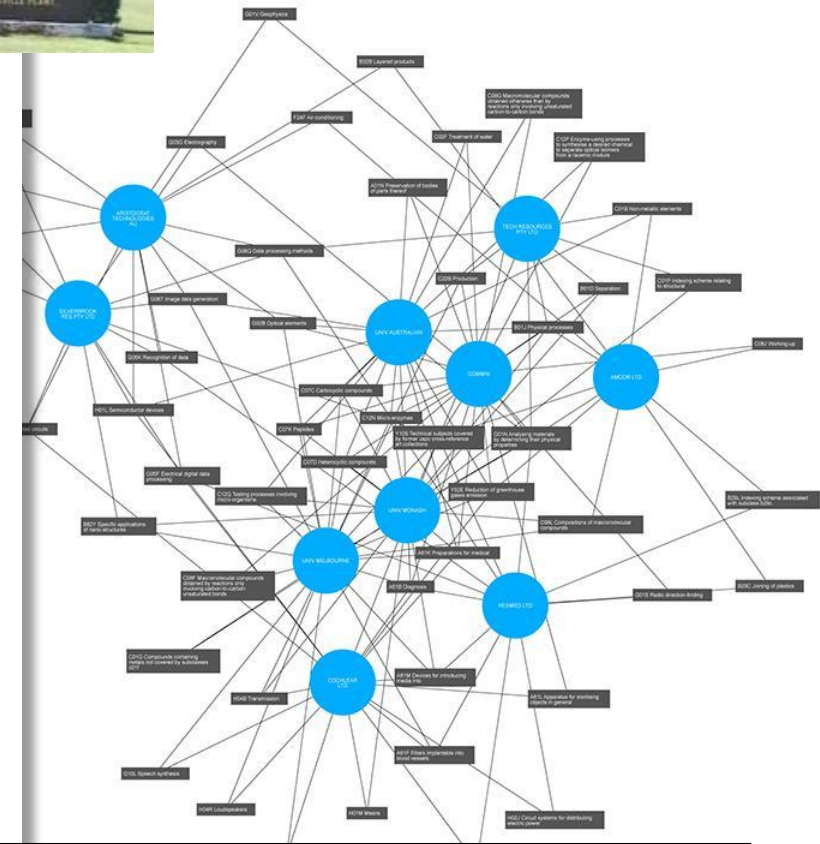
Innovation
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How can I find new staff and boost their active knowledge?



NAT UNIV CHONBUK IND COOP FOUN UNIV CHIENKUO TECHNOLOGY UNIV CHINA MINING
 UNIV CONNECTICUT UNIV DALIAN NATIONALITIES UNIV FAR EAST UNIV JIANGNAN
 UNIV KAO YUAN UNIV KUNMING SCIENCE & TECH UNIV MICHIGAN
 UNIV NOTRE DAME DU LAC UNIV SHANDONG SCIENCE & TECH
 UNIV SHANGHAI DIANJI UNIV SHANGHAI ENG SCIENCE UNIV SOUTHWEST
 UNIV VANDERBILT UNIV VIRGINIA UNIV ZHEJIANG
 UNIV ZHEJIANG NORMAL
 UNIV ZHEJIANG TECHNOLOGY

FOOTE ROGER MERVYN LLOYD
 RAJE MILIND
 MCAULIFFE PATRICK J



	RESMED	COCHLEAR	SILVERBROOK
FOOTE ROGER MERVYN LLOYD	7		56
RAJE MILIND	28	1	
MCAULIFFE PATRICK J	11		7

How to remove water from the glass without touching the glass?



R&D

How to remove water from the glass without touching the glass?



R&D

absorption • acoustic cavitation • acoustic vibrations • bernoulli • boiling • capillary condensation
capillary pressure • coanda • condensation • deformation • electrocapillarity • electrocapillary
electrolysis • evaporation
explosion • foam • funnel
gravity • force • magnetostriction
osmosis • surface tension
the • sonic vibration
U • wetting

Back move liquid - Text (Absorption and 48 more) ⓘ

coanda (9 patents)

<input type="checkbox"/>	Publication	Title	Publicatio...	Standardized ...
<input type="checkbox"/>	US2013053...	Reduced-pressure dressings, systems, and methods with evaporative devi...	28 Feb 2013	COULTHARD RI...
<input type="checkbox"/>	CN2021073...	Continuous delivery pump structure of materials wrapped by blast for deliv...	11 Jan 2012	ZHI HE
<input type="checkbox"/>	US2010295...	Rotating coanda catcher	25 Nov 2010	XU JINQUAN
<input type="checkbox"/>	US2009135...	Liquid drop dispenser with movable deflector	28 May 2009	EASTMAN KO...
<input type="checkbox"/>	US2008271...	Recirculating coanda water extractor	6 Nov 2008	HONEYWELL I...
<input type="checkbox"/>	CN2009527...	Bright flame type flat-flame gas burner adapted to aluminiumalloy molten li...	26 Sep 2007	SHANGHAI AIL...
<input type="checkbox"/>	JP20051342...	Air type liquid level sensor, and method of detecting liquid level using the ...	26 May 2005	TODOROKI IND...
<input type="checkbox"/>	WO0208051...	Method and apparatus for increasing the effectiveness and efficiency of m...	31 Jan 2002	CORTANA CORP
<input type="checkbox"/>	FI970387A0	Method and device for coating moving web	30 Jan 1997	VALMET CORP

How to measure or detect a magnetic field?

abragam effect • acoustic emission • amr effect • azimuthal effect • **barkhausen (2)** • birefringence effect

coanda effect • corbino effect • delta-e effect • **diffraction** • doppler effect • **electret** • **electrokinetic effect**

faraday effect (3) • gen effect • gmr effect • **hall effect** • inverse-magnetostrictive effect

jfet effect • jitter effect • **josephson effect** • **kerr effect** • **light polarization** • **luminescence**

magnetofluidic effect

magnetoresist

meissner effect • mi

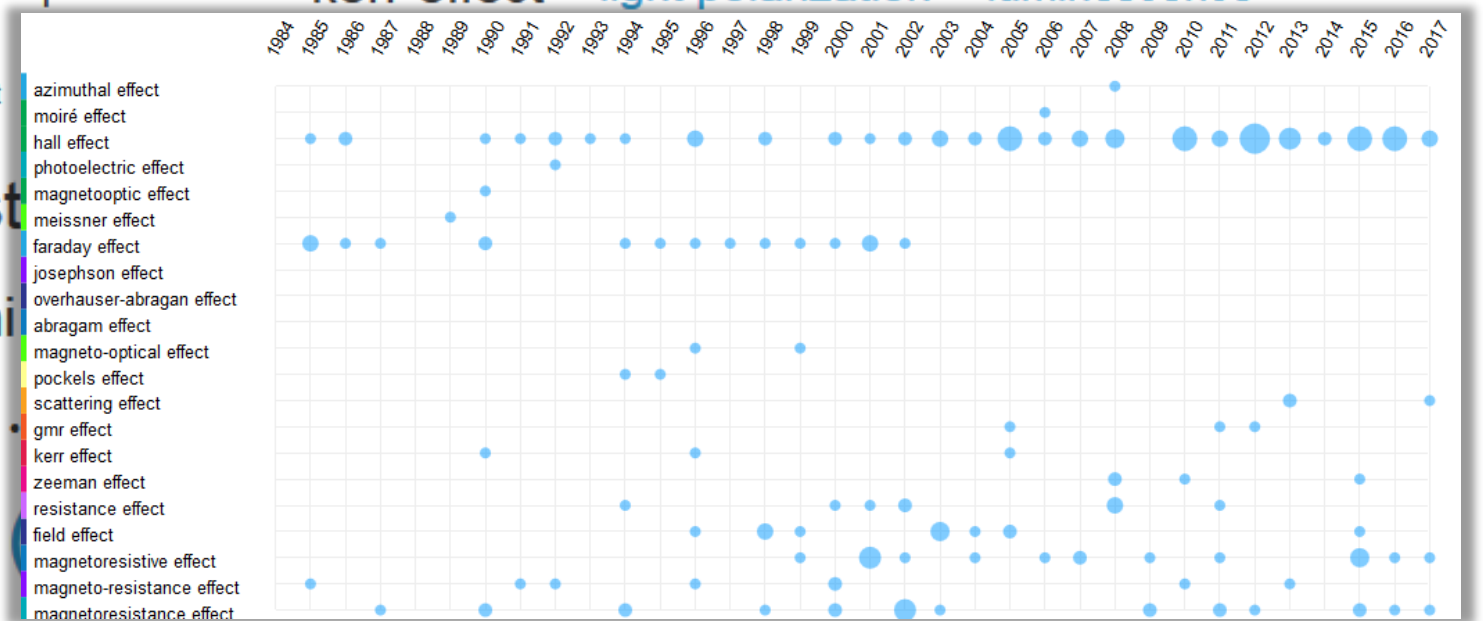
overhauser-abragan effect

resonance

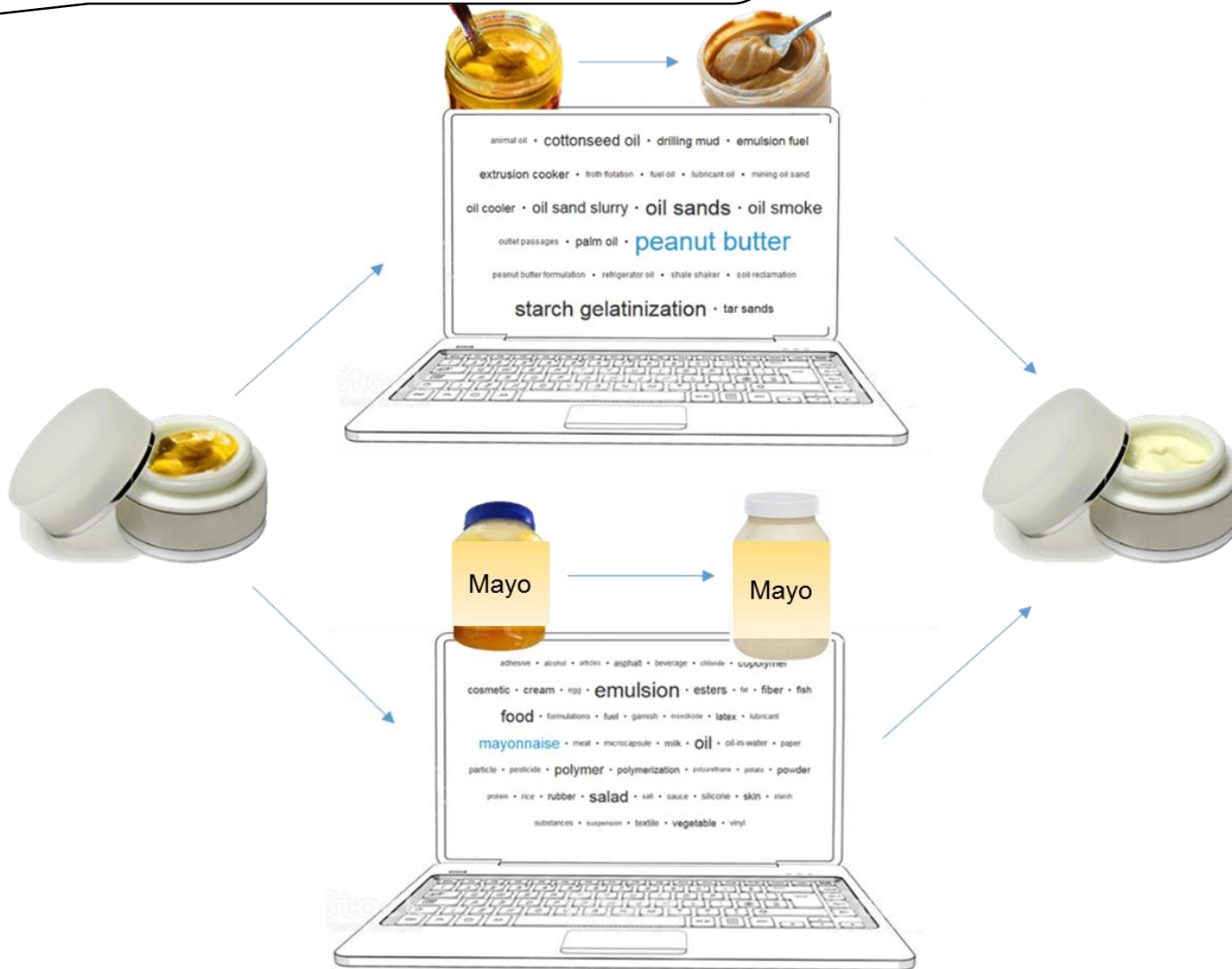
seebeck effect • spin-hall effect • **tmr effect** • venturi effect • **wigan effect** • xmr effect • **zeeman (3)**



R&D



How to solve the oil separation problem in cosmetic cream?



R&D

How should I design the new projector, what is important?



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London

How should I design the new projector, what is important?



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Performance

accuracy

adequate level of output

brightness

aspect ratio

distance

electrode

high quality demands of digital

cinema

illuminance

illumination

luminance

projected image

projection

resolution

state

system

Harm

aberration-free

alkali-free

damage

defect-free

distortion

distortion-free

dust

dust-free

electric discharge

environmental-friendly

environment-friendly

error-free

flicker-free

focus-free

heat

need

noise

noise-free

problem

volume

Interface

autofocus

auto-focus

autonomous

autonomously

autostereoscopic

auto-stereoscopic

convenient

easy to adjust

easy to carry

easy to cause

easy to control

easy to generate

easy to implement

easy to install

easy to make

easy to manufacture

easy to operate

easy to produce

easy to understand

easy to use

self-contained

self-luminous

size

touch-free

user

user-friendly

Cost

cost

efficiency

maintenance-free

manufacturing cost

power consumption

More GOOD
Less BAD
EASIER
CHEAPER

How should I design the new projector, what is important?



Increase

accuracy (304)
accurate (192)
angle (188)
area (243)
brightness (512)
compact (254)
contrast (403)
convenient (303)
cost (332)
difficult (290)
distance (235)
efficiency (398)
image (565)
image quality (275)
intensity (196)
light (404)
luminance (246)
power (186)
projected image (186)
projector (304)
resolution (473)
screen (197)
size (281)
temperature (211)
time (198)

Decrease

brightness (207)
component (176)
contrast (202)
cost (789)
damage (217)
device (165)
distortion (225)
dust (296)
heat (268)
image (393)
image quality (183)
light (461)
manufacturing cost (259)
need (310)
noise (411)
power (166)
power consumption (300)
problem (280)
projected image (191)
projector (466)
size (490)
temperature (171)
time (273)
user (197)
volume (157)

Change or stabilize

adequate level of output brightness (16)
alignment (26)
arc discharge (13)
aspect ratio (17)
b (15)
brightness (20)
circuit (14)
device (15)
discharge (48)
electric discharge (13)
electrode (14)
high quality demands of digital cinema (13)
illuminance (12)
illumination (13)
image (43)
image quality (23)
light (15)
position (20)
projected image (26)
projection (14)
 projector (57)
screen (20)
state (54)
system (14)
temperature (19)

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Where could I find out -of-domain experts to tackle my challenges?

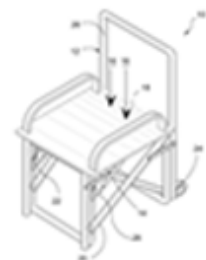
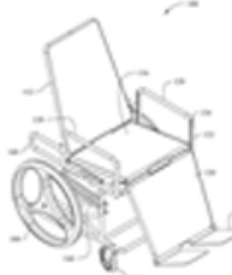

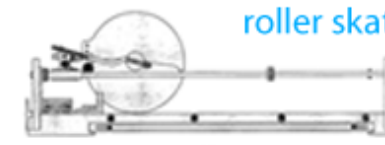
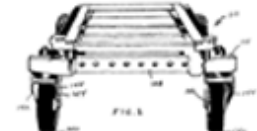


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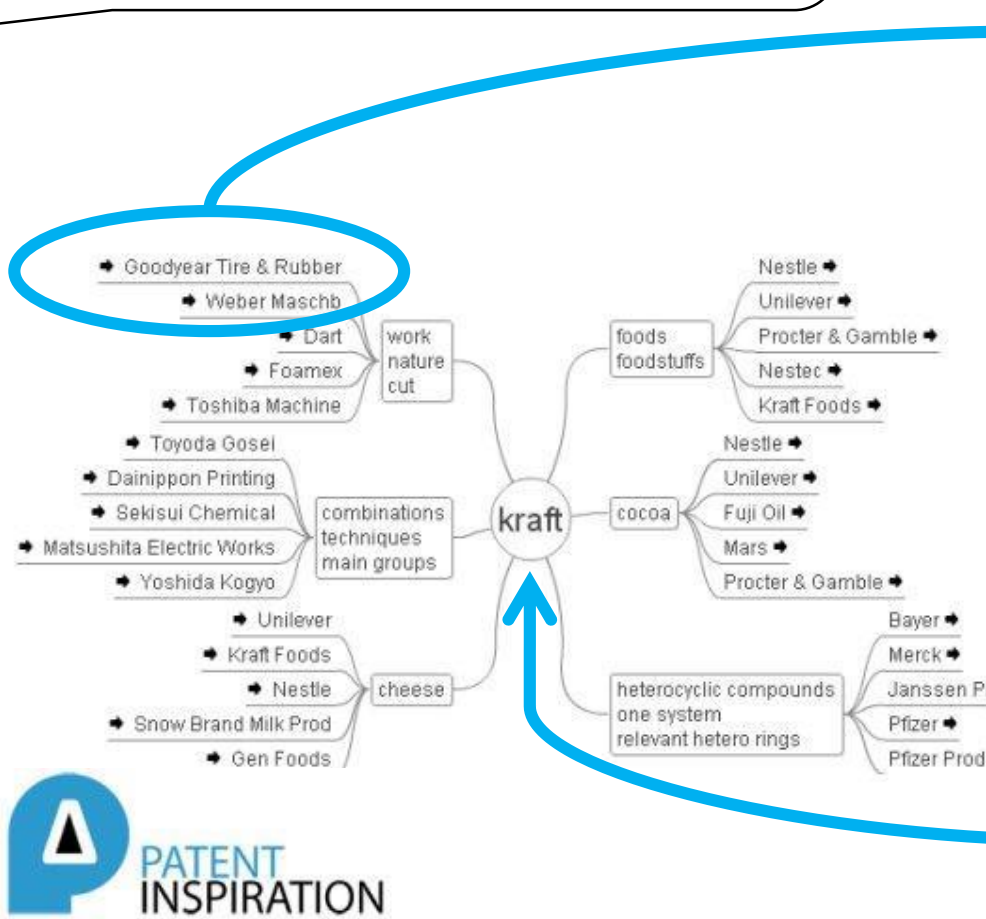
Where could I find inspirational areas to innovate a bicycle, or **prior art**?



	<i>adjustable</i>	<i>collapsible</i>	<i>comfortable</i>	<i>foldable</i>	<i>folding</i>	<i>pneumatic</i>	<i>portable</i>	<i>wheel</i>	Terms	Patents	
	•	•	•	•	•	•	•	•	8	64	→ bicycle, bed, chair
	•	•	•	•	•	•	•	•	7	34	
← wheelchair, stroller	•	•	•	•	•	•	•	•	7	110	
	•	•	•	•	•	•	•	•	7	261	→ lawnmower
	•	•	•	•	•	•	•	•	7	7	
	•	•	•	•	•	•	•	•	7	110	
	•	•	•	•	•	•	•	•	7	82	
	•	•	•	•	•	•	•	•	7	40	← roller skate, saw
	•	•	•	•	•	•	•	•	7	4	→ trailer
	•	•	•	•	•	•	•	•	6	38	
	•	•	•	•	•	•	•	•	6	532	

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Who is solving similar problems in other industrial areas?



kraft related company Goodyear Tire And Rubber patents

Number	Title	Applicant(s)	Publication Date
DE6022206T	Method for cutting elastomeric materials	GOODYEAR TIRE & RUBBER (I	12/06/2006
CN1663882	Method for cutting elastomeric materials and the	GOODYEAR TIRE & RUBBER C C	1/11/2006
CN1796063	Apparatus for cutting elastomeric materials	GOODYEAR TIRE & RUBBER (I	5/07/2006
US6528911	Method and apparatus for cutting tire ply stock	GOODYEAR TIRE & RUBBER (I	16/08/2005
DE69614478T	METHOD AND APPARATUS FOR CUTTING ELA	GOODYEAR TIRE & RUBBER (I	19/02/2004
DE69604967T	FORMING SPLICE JOINTS FOR ELASTOMERIC	GOODYEAR TIRE & RUBBER (I	2/10/2003
DE696144790	METHOD AND APPARATUS FOR CUTTING ELA	GOODYEAR TIRE & RUBBER (I	12/06/2003
BR0202007	Method for cutting elastomeric materials	GOODYEAR TIRE & RUBBER (I	15/04/2003
JP2001298	Heated cutting wheel	GOODYEAR TIRE & RUBBER (I	11/03/2003
BR0203038380	BASE CUTTING APPARATUS HAVING CUTTING	GOODYEAR TIRE & RUBBER	13/02/2003

Method for cutting elastomeric materials (DE6022206T)

Publication date: 12/06/2006

Inventor: DOWNING DANIEL RAY

Applicant: GOODYEAR TIRE & RUBBER

Abstract: A method and an apparatus for cutting segments (10) to desired lengths from a strip (1) of elastomeric tire components having at least one cord reinforced component includes the step of impacting one cord (22) as the cut is being made and lifting the cord (22) to avoid cutting cords (22) while directing the cutting path (3) along the lifted cord (22). The article resulting from the method has a plurality of cords (22) adjacent a flat cut splicing surface (8) suitable for...

Description / Claims: Background of the invention: This invention relates to a method and apparatus for cutting elastomeric materials at low skew angles, in particular cutting layered composites of elastomeric materials including (L...more)

Brief description of the drawings: The structure, operation, and advantage of the invention

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Imperial College London



"Research is often Re-Search"

How to complete my filter keywords?
How do I hide my patents, and find others?



IP

Professional

Find related terms ?

Find synonyms, antonyms and misspelled words to improve your filter results.
e.g. *biodegradable, heat-exchanger, electric car*

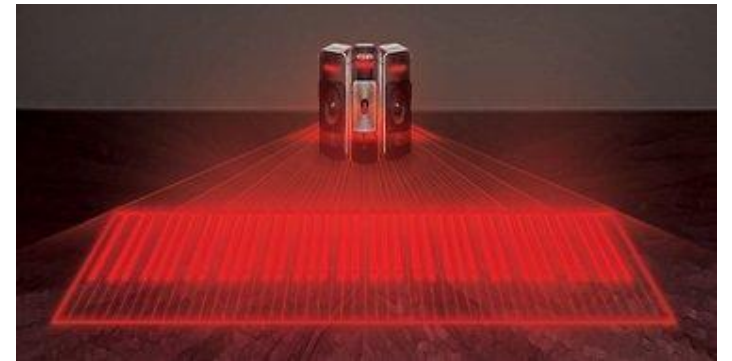
antimicrobial antibacterial anti-microbial antifungal bactericidal
antibacterial agent anti-bacterial anti-yeast activity bacteriostatic anti-biofilm
fungicidal material anti-fungal effects bacteriocidal properties antialgal antibiotic
bacteriostatic compound tropolone extract anti fungal agent antifungal actions
bacteriacidal microbicidal biocidic anti-algal antiseptic preparations
antifungal characteristics antibiotic potentiator anti-yeast agent bismuth thiols
antimicrobial conventional antibacterial agent anti microbial properties

Find related terms ?

Find synonyms, antonyms and misspelled words to improve your filter results.
e.g. *biodegradable, heat-exchanger, electric car*

baby bottle nursing bottle beverage container feeding bottle pacifier
drinking cup water bottle baby feeding bottle sippy cup drinking vessel
drink container disposable container drinking container standard baby bottle
infant feeding bottle bottle assembly sports bottle drinking bottle
drinking receptacle nursing bottles nurser squeezable baby bottle drink bottle
bottle holder drinking device bottle baby food jar baby bottle holder nipple
beverage cup soother conventional bottle food container canteen

How can I predict property variations in my product or technology?



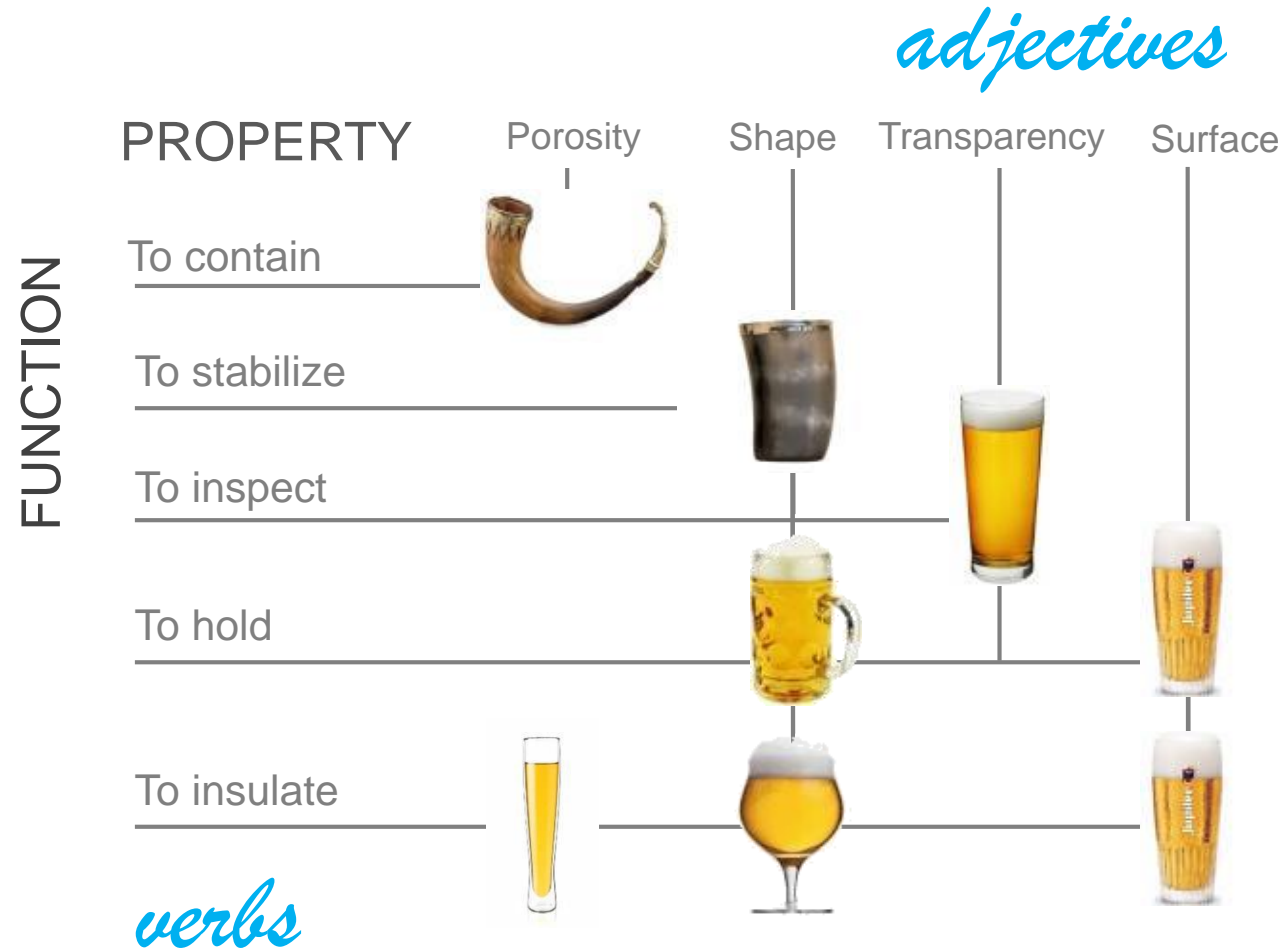
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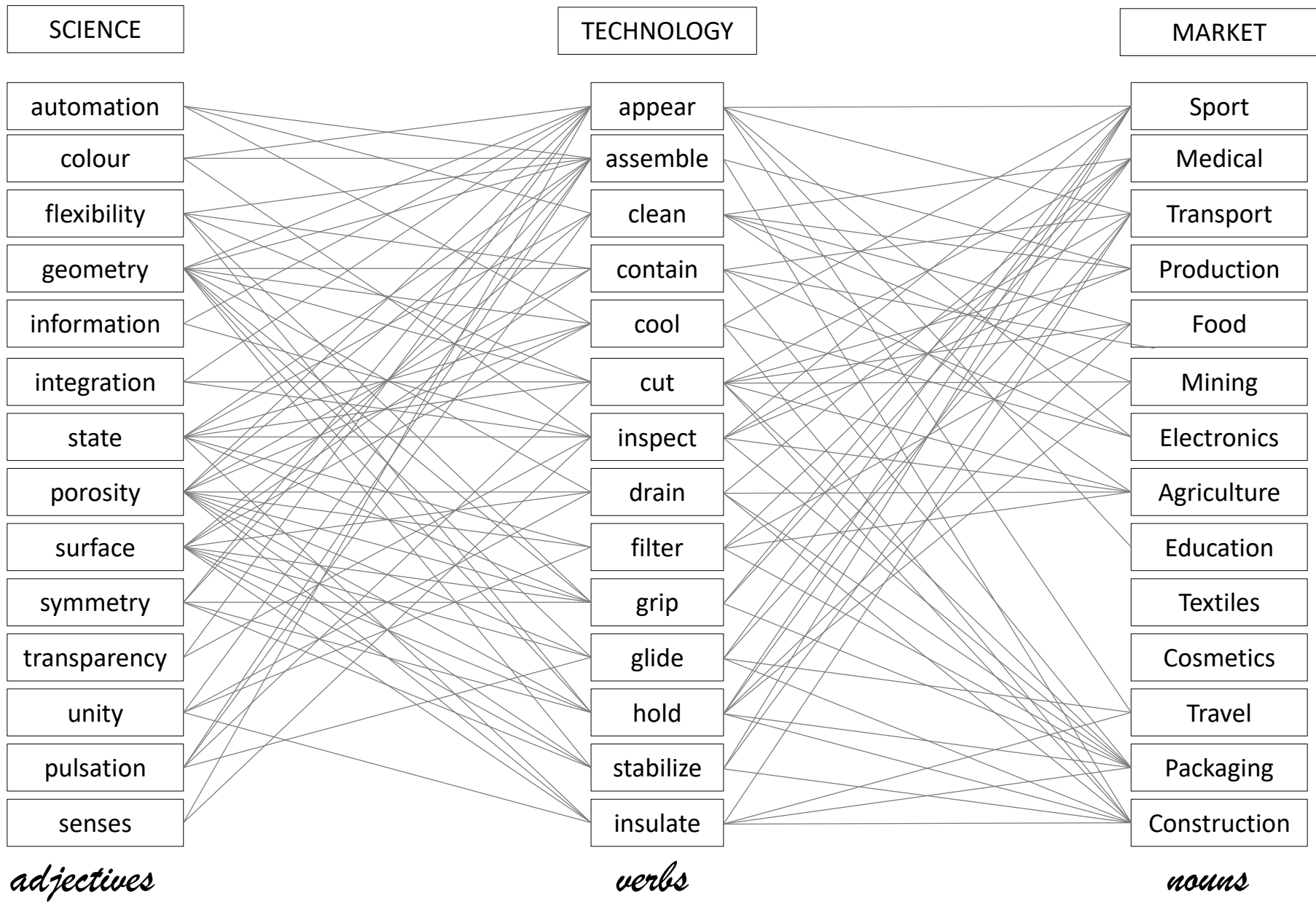
How can I predict property variations in my product or technology?



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What are the properties or features, what are the functions or benefits?



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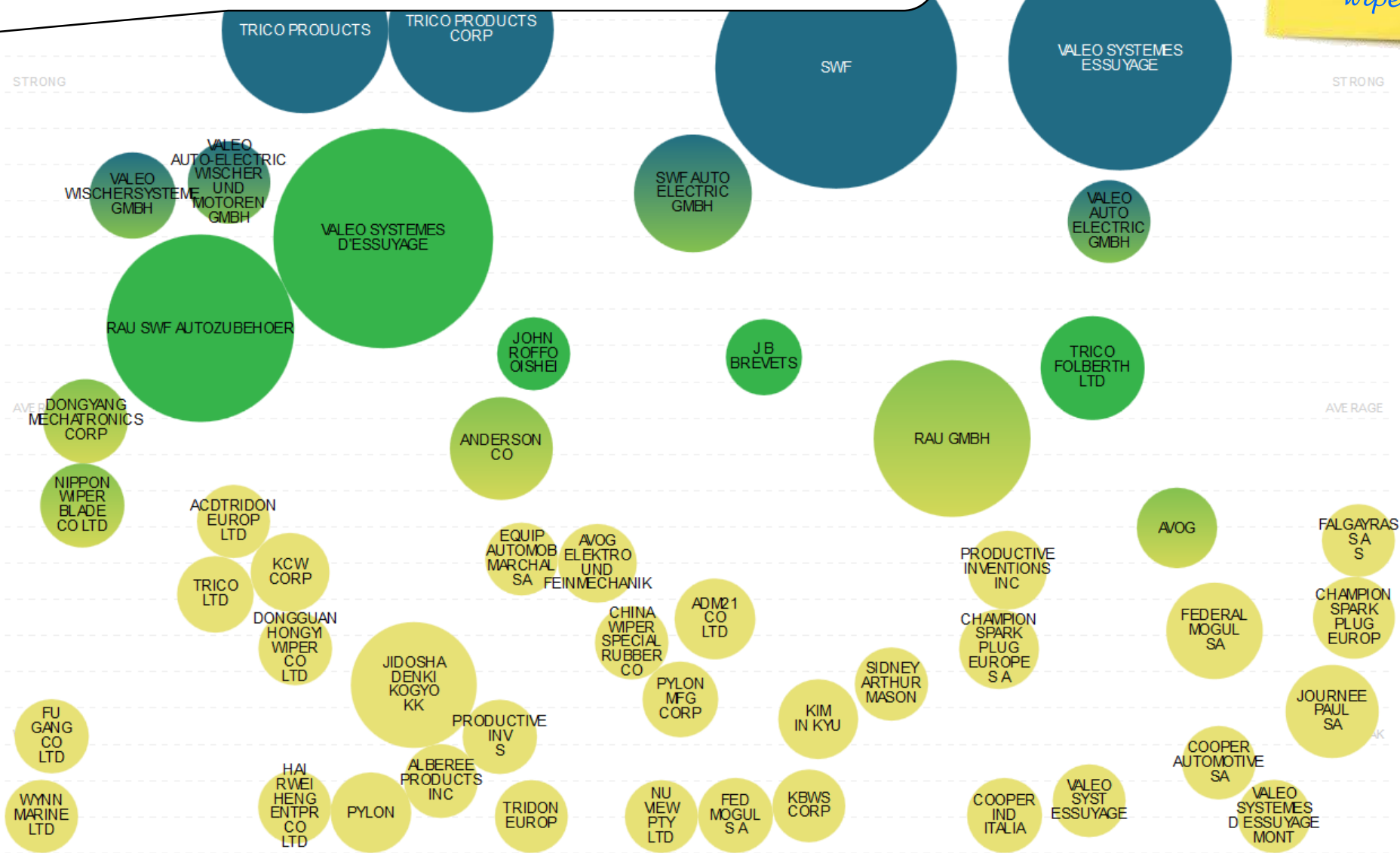
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- brush • anchorless toothbrush • angled toothbrush • antibacterial toothbrush
- battery-operated toothbrush • bendable toothbrush • biodegradable toothbrush • bottom toothbrush
- changeable-head toothbrush • **chewable toothbrush** • closed toothbrush • collapsible toothbrush • compact toothbrush • composite toothbrush • concave toothbrush
- controllable toothbrush • cordless toothbrush • cylindrical toothbrush • deformable toothbrush • dentifrice-dispensing toothbrush • **disposable toothbrush**
- double-headed toothbrush • double-sided toothbrush • drivable toothbrush • dual-headed toothbrush • dual-purpose toothbrush • dustproof toothbrush • elastic toothbrush
- electric toothbrush** • electromagnetic toothbrush • electromechanical toothbrush • electromotive toothbrush • electronic toothbrush
- elliptic toothbrush • environment-friendly toothbrush • ergonomic toothbrush • finger-mounted toothbrush • finished toothbrush • flexible toothbrush
- foldable toothbrush • friendly toothbrush
- hollow toothbrush • hydraulic toothbrush • illuminating toothbrush
- interactive toothbrush • interchangeable toothbrush
- magnetic toothbrush • magnetotherapeutic toothbrush • **mechanical toothbrush** • micro toothbrush • miniature toothbrush • mobile toothbrush • modular toothbrush
- motor-driven toothbrush • motorized toothbrush • multi-component toothbrush • multi-face toothbrush • **multifunctional toothbrush** • multi-headed toothbrush
- multi-layer toothbrush • multi-motion toothbrush • multipurpose toothbrush • musical toothbrush • optical toothbrush • oscillatory toothbrush • personalized toothbrush
- phototherapeutic toothbrush • polygonal toothbrush • **portable toothbrush** • push-pull toothbrush • rechargeable toothbrush • refillable toothbrush • resilient toothbrush • resonant toothbrush
- retractable toothbrush • revolving toothbrush • **rotary toothbrush** • secondary toothbrush • self-cleaning toothbrush • self-standing toothbrush • sonic toothbrush • spray-type toothbrush
- supersonic toothbrush • telescopic toothbrush • toothpaste-dispensing toothbrush • transparent toothbrush • two-in-one toothbrush • ultrasonic toothbrush
- ultraviolet toothbrush • vibratory toothbrush • waterless toothbrush • water-spraying toothbrush • wear-indicating toothbrush

	anchor	bend	clean	direct	fold	grip	hold	pivot	protect	reach	store	stretch	twist
flexible	1	8	27	5	3	42	11	8	4	3	1	1	4

Who are prospects: Who are competitors of my client for a specific product?

IP Competitors
BOSCH in
windscreen
wipers



Which other packaging market has a SiO_x barrier coating?

Types of packaging

27.64%

335

absorption packaging • aesthetic packaging • aluminum packaging • art packages • aseptic packaging (3) • atmosphere packaging (3) • bag package (6)
barrier packaging (2) • beer packaging • beverage packaged (4) • blister package (3) • blow-molded package (2) • bottles packaging • bulk packaged (2)
can-like packaging • cells packaged • ceramic package • chip packaging (2) • cigarette package • circuit package (2) • coffee package (2) • composite packaging • confectionary packaging
cook-in packaging • crumpling packaging • cup-shaped package (2) • dangan packaging (2) • device package • device packages (2) • diagram package
disposable packages • draw packaging • drink packages (4) • drug packaging (2) • dvd packaged • electronic packaging • environmental packaging • ermoformable packaging
film packaging (4) • flip-chip package • fluid package • foil packaging • foil-free packaging • food packaging (4) • gas-barrier packaging • gas-tight packages
glass packaging (2) • gum packaging (2) • helmet packaging • hot package • ic packages • irradiation package • juice packages • leak-free packages • lightweight packaging • liquid packaging
material package • meat-containing packaging • medical packaging (4) • metal packaging • metalfoil-free packaging • metal-free packaging • microstructure package • microwave-heatable package (3)
mirror packages • moisture-resistant package • non-foil packaging • paper packaging • paperboard packages (2) • parallelepipedic packaging (4)
parylene package • pet packaging • pharmaceutical packages (3) • pillow-shaped packaging (4) • pot packaging
pouch packaging • pressurized packaging • pyrogen-free packaging • recyclable packaging • retort packaging (8) • rex packaging • rubber packaging • scavenging packaging (3)
semiconductor packages (2) • sheet packaging • shoddy packaging • skin packaging • slip packages • snack packaging • sterile package (7)
thermoplastic package • vacuum packaging (5) • vapor packaging • wall package • water packaged • wax packages



Marketing

IP driven Innovation?

What VALUE do we WANT?

More GOOD	Easier USE
clean fresh breath brush oral hygiene cleaning effect polish health	comfortable flexibility self-standing self-cleaning user friendly
Less BAD	Less COS
pain plaque environmental friendly bacteria tartar	cost effic efficient ener production

Aim

What's your ABSTRACT system?

Properties	Functions
daily hollow portable sanitary oral hygiene flexible Lift	clean sanitize floss brush wash rinse polish

- arm • articles • automobile • baby • barrels
- belt • bottle • **brush** • buffing • car
- care • carpets • chocolate • cleaner • clothes
- collector • consumption • cosmetic • detergent • diaper
- dishes • drums • floors • glass • gloves • jars
- kits • leather-shoes • likearticles • manual • mat • mouse
- ports • pots • pressure • receptacles • regimens
- reservoir • **shoe** • shoe-cleaning • textile • toilet
- tooth • udder • utensils • vessels • wafer
- washer • wheel • windows

What RESOURCES do we HAVE?

house (5) bedroom (5) kitchen (84) sunlight (1)	surrounding bathroom (475) mirror (989) shower (100) toilet (473) air (318)	bedroom tempe (917) sound road (6) traffic
before... bedroom (5) sleeping (35) kitchen (84) eating (98) shower (100)	the BOX brushing teeth (11) refresh breath (85)	bedroom sleeping garage car (118) driving to work (0)
food (1559) pillow (12) mattress (7) shower head (10) nozzle (705)	components sand (88) bristles (11850) brush (475) brush holder (318) head (731) body (270) Toothpaste (221)	bed (214) cloth (130) stereo (57) car (118) battery (3130) compressor (33)

Unbox

COACHING AVATAR

AIM

AULVIA brings a value structure with automated value elements and potential conflicts to solve.

USE

AULVIA mines resources in time and space, and places them in opportunity windows.

LINK

AULVIA suggests properties, components and functions to construct your ProductDNA.

IMPORT

Based on your ProductDNA AULVIA scans other domains to suggest tech imports.

VARY

A checklist of what to change and what to gain, that's the core of innovation hints.

ELECT

Your list of new ideas and concepts can be subjected to a set of

Variate

Evaluate

What VALUE do we GAIN?

- POROSITY
- SURFACE
- FLEXIBILITY
- SHAPE
- PULSATION
- INTEGRATION
- TRANSPARENCY
- STATE CHANGE
- SENSES
- INFORMATION
- SEGMENTATION
- COORDINATION
- ASYMMETRY
- COLOUR
- FOAM
- SPRAY



R&D

The future of the IP Professional

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Imperial College
s@aulive.com

