



ความสำคัญของการสืบค้นฐานข้อมูล สิทธิบัตรเพื่อการวิจัยและพัฒนา

ผศ.ดร.อัศววิทย์ กาญจนโอภาส

ศูนย์ทรัพย์สินทางปัญญา

อุทยานวิทยาศาสตร์มหาวิทยาลัยสงขลานครินทร์

28 เมษายน 2558

คณะทันตแพทยศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ

หน่วยวิจัย สถานวิจัยความเป็นเลิศ

มหาวิทยาลัย สถาบันวิจัย

วิจัย

เงิน

ผลการวิจัย

&

&

ทรัพยากรอื่น ๆ

ความรู้

ศูนย์บ่มเพาะธุรกิจ

TLO

Research Commercialization

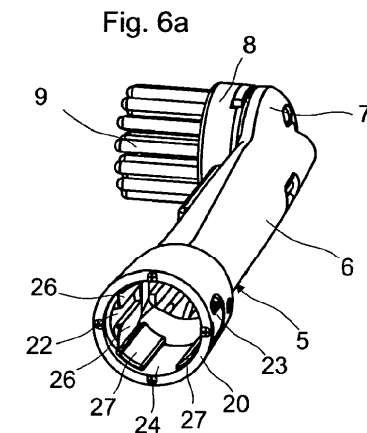
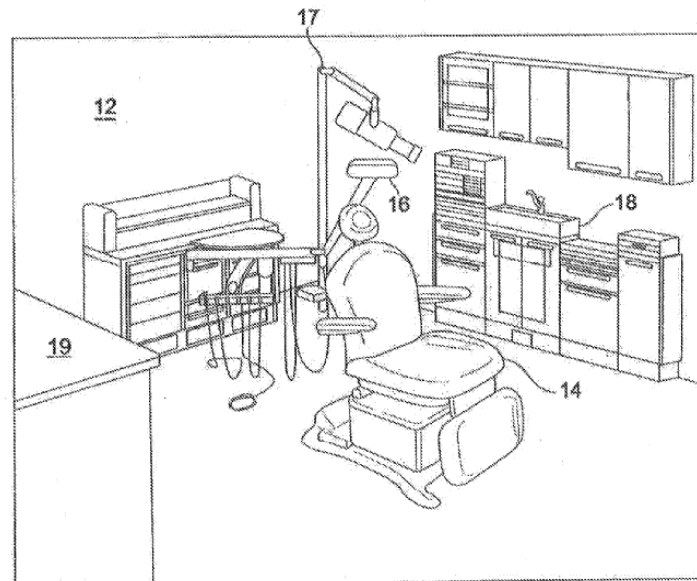
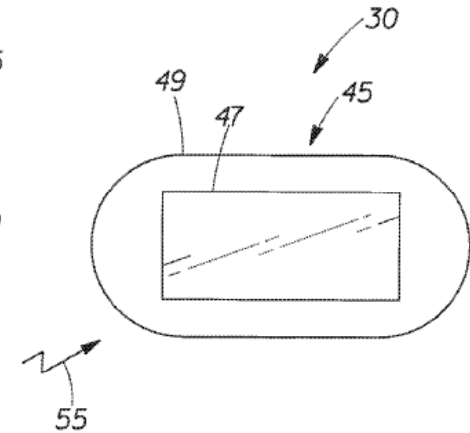
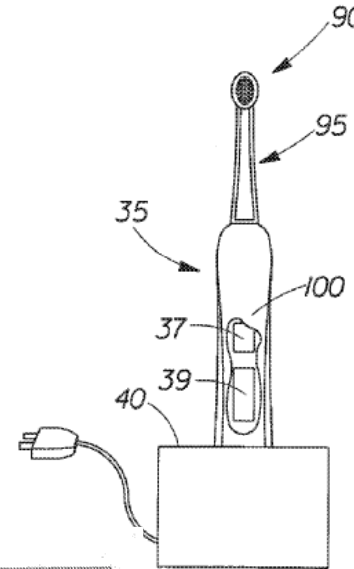
Licensing, Startup

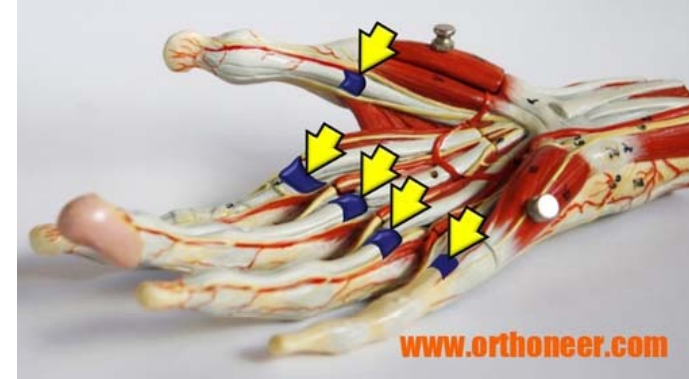
ผู้ประกอบการ ภาคเอกชน

การวิจัยและพัฒนา

- สิ่งประดิษฐ์ใหม่ เช่น

- อุปกรณ์
- เครื่องมือ
- สูตรผสม
- กรรมวิธี

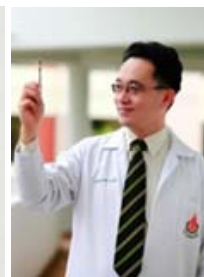




Carpal Tunnel Syndrome (CTS)

Trigger fingers

TWO MAJOR HEALTH RELATED PROBLEMS IN THE SOUTH



"In the beginning, I noticed that with limited resources and time, many patients were on a waiting list for CTR surgery. Some people had waited for more than 3 months. Mostly those who had conventional surgery (open-surgery) had palmar pain and a noticeable and painful scar. The post-op condition sincerely scared patients, so some of them decided not to follow-through with CTR surgery. *I met with patients who actually waited until their hand had become withered before they acquiesced and agreed to the surgery.* You can imagine how it hurts me as a doctor to see people in pain and anxiety, so they inspired me to develop a simple device which shortens the time for operation, causes less pain to patients, and allows them to recover and return to work faster, so that they can be happier. That's the reason I invented the MiniSURE Kit."

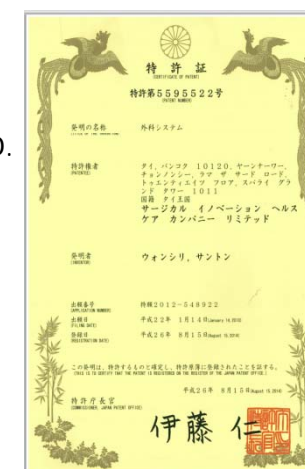
Sunton Wongsiri, M.D.

Inventors

1. Asst.Prof.Sunton Wongsiri, M.D.
2. Assoc.Prof.Boonsin Tangtragulwanich, M.D.
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PCT/TH2010/000002 and
PCT/TH2010/000039



3 Approaches for Carpal Tunnel Release Surgery are:

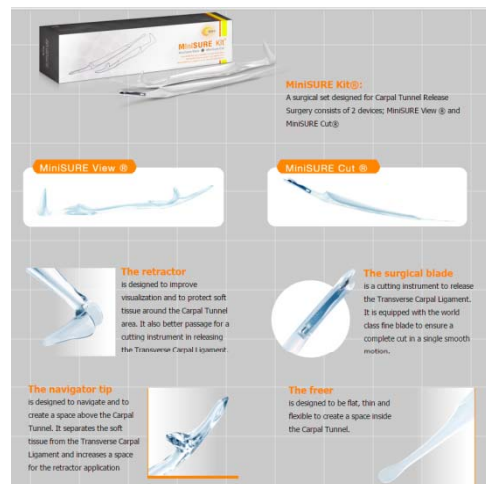
Open Surgery, which allows the doctor to see more of the inner tissues, including the full width of the transverse carpal ligament where it is to be cut. Open surgery requires an incision in the palm and wrist, which disturbs more of the tissues in the hand, and requires a longer recovery period. It leaves a larger scar than does endoscopic and minimally invasive surgery. But there may be less chance of other complications.

Endoscopic Surgery, which requires only a small incision at the wrist (single-portal technique) or at the wrist and palm (two-portal technique), and Recovery is quicker than with open surgery. The scars heal more quickly, are smaller, and tend to be less painful at 3 months after surgery. The operation is much more expensive than the Open Surgery. There may be a higher rate of re-operation after the surgery.

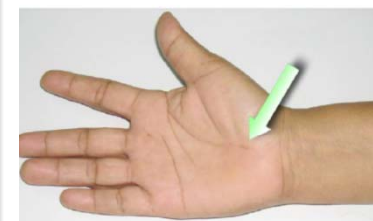
A Minimally Invasive Surgery or Mini-Open Release Surgery. This requires a smaller incision than standard open carpal tunnel release surgery to minimize healing time and scar formation. But it also allows the surgeon to view the ligament directly during the surgery to minimize danger to the nerve itself. This is smart, simple, safe, speed and small.



PSU-CARPAL TUNNEL RETRACTOR



OLD STANDARD INCISION



NEW PSU-CTR

WHY MiniSURE Kit?

- Smart**
 - Minimize Operation Cost
 - Less Post-Op Medication
- Speed**
 - Speedy Recovery
 - Shorten Operating Time
- Simple**
 - Only 5 Easy Steps
 - Less Complication
- Small**
 - Wound Size
 - Less Staff
 - Less Post-Op Medication
- Safe**
 - Visualize Carpal Tunnel

	Open Technique	Endoscopic Technique	Limited Technique	MiniSURE Technique
Quick service, no hospital admission, save operative time	30-60 Mins	30-60 Mins	20-30 Mins ✓	15-20 Mins ✓
Reduce wound size	3-6 cm.	1.5-2.0 cm. ✓	1.5-2.0 cm. ✓	1.5-2.0 cm. ✓
Reduce pain and complication	+++++ Big incision	++ Small incision	+++ Can't see inside Tunnel	+ Small incision ✓
Less staff and tools	3 nurses+1anes	3 nurses+1anes	1 nurses ✓	1 nurses ✓
Less surgical cost	\$\$\$ Big surgical set + anes	\$\$\$\$\$ Hi-tech machine + anes	\$\$ Small set + local anes	\$ Small set + local anes ✓
Short recovery time	10-14 days	7-10 days	3-5 days ✓	3-5 days ✓



1st Prizer Winner

True Innovation Awards 2012



A-knife for Trigger Finger Surgery



นิ้วล็อก

Trigger Finger

ไม่ต้องผ่าตัด

เจาะด้วย



-Knife



 -Knife :for percutaneous trigger finger release



-Knife

สำหรับปล่อยนิ้วล็อกแบบเจาะผ่านผิวหนัง

- ส่วนปลายนิ้วล็อกแบบ... สำหรับใช้กับผู้ป่วยที่มีอาการนิ้วล็อก
- ส่วนปลาย... สำหรับใช้กับผู้ป่วยที่มีอาการนิ้วล็อก



บริษัท จอร์ไดเนียร์ จำกัด

เลขที่ 15 ซากการพัฒนาระบบการสื่อสาร การบริการและระบบสารสนเทศ
อาคารใหม่ 1.50000 10110
โทร 02-5577000, 02-5577001, 0-2001, 02-5577002 ถึง 02-5577005

ขั้นตอนการผ่าตัดนิ้วล็อกด้วย -Knife











 -Knife

ขั้นตอนการผ่าตัด

1. เตรียมข้อมือแล้ว
2. ทำฉีดยาชาลงบนฝ่ามือบริเวณข้อมือ 2 นิ้วขึ้นไป ที่ตำแหน่งของกระดูกนิ้ว
3. ล้าง A-Knife ผ่านรอยบากที่ฉีดยาชาเพื่อป้องกันเชื้อโรคและทำความสะอาดนิ้วมือ ใส่ในถุงมือที่สะอาดทุกครั้ง
4. ล้างแผลบนข้อมือด้วย A-Knife ทำเป็นขีดรอยบากที่นิ้ว
5. ถัดมาคือ 4-5 cm เมื่อได้รอยบากที่นิ้วแล้วทำการบดเบาๆกับนิ้วมือ กรณีฝ่ามือหรือข้อมือมีอาการเจ็บปวดสามารถฉีดยาชาตามข้อนิ้วมือ 2 นิ้วขึ้นไป แล้วใช้นิ้วมือลูบเบาๆกับนิ้วมือเพื่อคลายการอักเสบของข้อนิ้วมือ 2 นิ้วขึ้นไป

ภายใต้การสนับสนุนของ

ศูนย์วิจัยทางการแพทย์ สาขามนุษยศาสตร์ มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี


๑ กรกฎาคม ๒๕๖๓





HC INNOVATION

เรื่อง : ภูมิธ ฤๅงกรวิวัฒน์กิจ
ภาพ : ดุสิตพัฒน์ มุขพิพิธ



นิ้วล็อค ไม่ต้องผ่าตัด ด้วย A-Knife

Why Conduct Patent Searching?

- Identifying key trends in technology development (Technology Roadmap)
- Patentability search (Prior art = Literature Review)
- Gathering business intelligence
- Avoiding patent infringement (Freedom to Operate)
- Patent valuation

PATENT INFORMATION ANALYSIS

INID code เลขกำกับ
ข้อความสากล

(10),(11) Publication no.

(43) Publication date

(21) Application no.

(22) Filing Date

(30) Priority data

(54) Title

(57) Abstract

(19)



กรมทรัพย์สินทางปัญญา
กระทรวงพาณิชย์

(11) เลขที่ประกาศโฆษณา 112827

(43) วันประกาศโฆษณา 12 มีนาคม 2555

(12) ประกาศโฆษณาคำขอรับสิทธิบัตรการประดิษฐ์

(51) IPC

(21) เลขที่คำขอ 0801005808	(51) สัญลักษณ์จำแนกการประดิษฐ์ระหว่างประเทศ Int.C1.10
(22) วันที่ยื่นคำขอ 26 ธันวาคม 2550	A61B 19/00
(31) เลขที่คำขอที่ยื่นครั้งแรก	(71) ผู้ขอรับสิทธิบัตร
(32) วันที่ยื่นคำขอครั้งแรก	มหาวิทยาลัยสงขลานครินทร์
(33) ประเทศที่ยื่นคำขอครั้งแรก	(72) ผู้ประดิษฐ์
	ผศ.นพ.สิทธิโชค อนันตเสวี และคณะ
	(74) ตัวแทน
(54) ชื่อที่แสดงถึงการประดิษฐ์	เครื่องถ่างเนื้อเยื่อ (Wound Retractor)
(57) บทสรุปการประดิษฐ์	เครื่องถ่างเนื้อเยื่อ (Wound Retractor) สำหรับช่วยถ่างและเพิ่มการมองเห็นในการผ่าตัดข้อมือแบบ บาดแคตเล็ก (Limited carpal tunnel release) ประกอบด้วยตัวห้ามจับ ส่วนขาก และปลายสอด ค้ำมีปุ่มนูนขนาดเล็กเพื่อเข้าร่องนิ้วชี้และนิ้วกลาง เพิ่มความกระชับขณะจับถือ และเมื่อจับ อุปกรณ์ยกขึ้นทำให้ส่วนฉากเปลี่ยนแรงดึงจากค้ำจับมาเป็นแรงสับผัดกดด้านบนนิ้วชี้เพื่อการยกที่ง่ายขึ้น ส่วนปลายสอดเป็นปลายที่มีส่วนนำเรียวมนเล็ก เพื่อเป็นตัวนำร่องให้ฐานเข้าไปง่ายขึ้น ฐานเป็นส่วนที่มี ช่องมองโค้งรูปครึ่งวงกลม ทำให้มองเห็นเนื้อเยื่อด้านล่างได้ชัดและสอดคล้องอุปกรณ์อื่นในช่องมองได้ มีปุ่ม ค้ำข้าง 2 ค้ำของช่องมองกันเนื้อเยื่อไม่ให้บังการมองเห็นหรือกีดขวางขณะสอดใส่อุปกรณ์ผ่าตัดผ่าน ในช่องมองทำให้การผ่าตัดมีความปลอดภัยสูงขึ้น และสะดวกรวดเร็ว

Why Make a Patent Landscape?

Public Sector Incentive

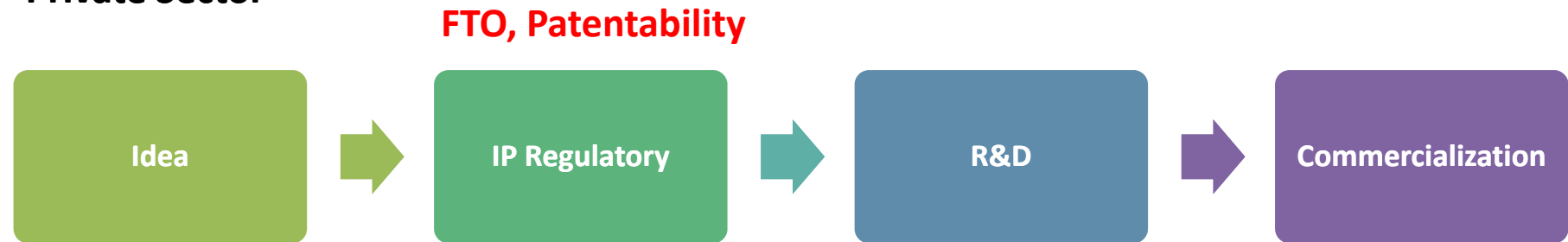
- Freedom to operate of research application
- Find potential market, resources and collaborators
- Determine patentability

Private Sector Incentive

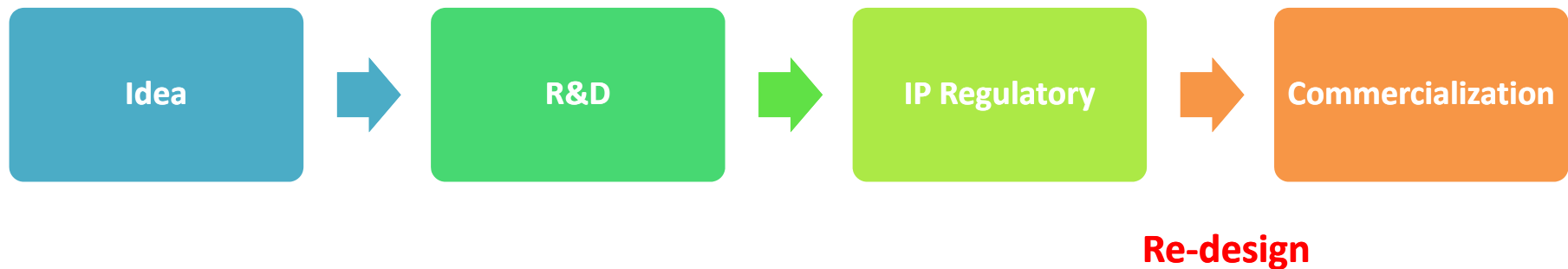
- Support business plan
- Strong IP portfolio may attract and retain investment capital
- Ensure exclusivity in new market
- Determine patentability

When to Conduct Patent Landscape?

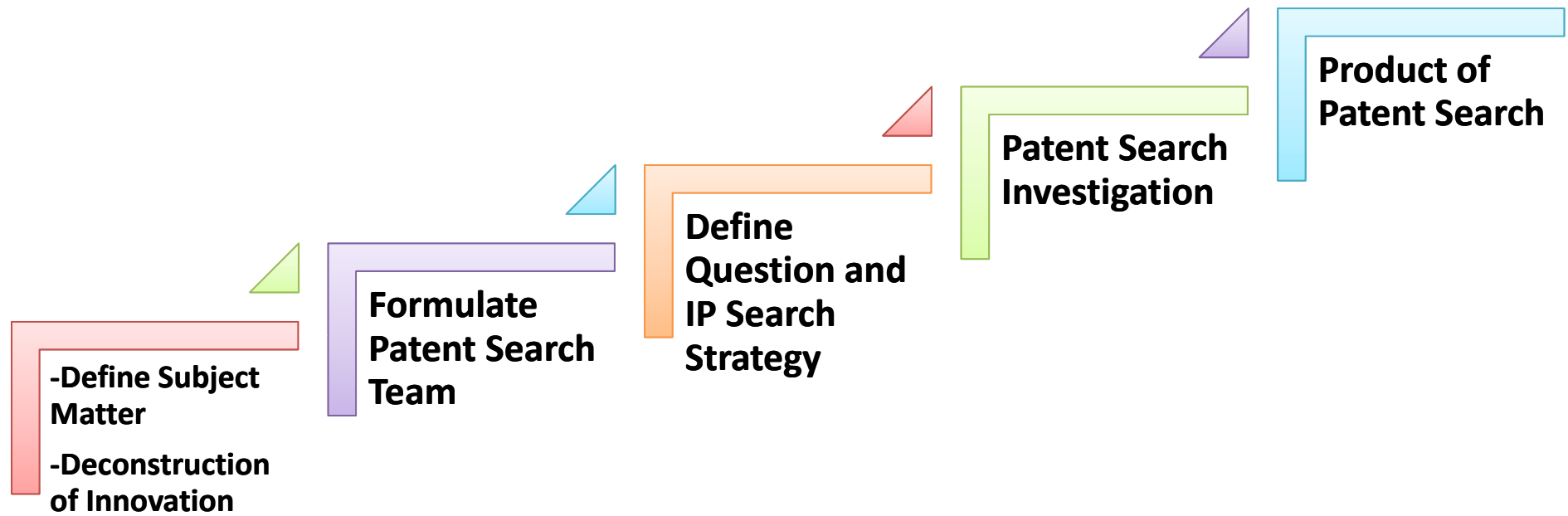
Private Sector



University, Public Research Institute



Patent Search Process



PATENT SEARCH CASE STUDIES

Results 1-10 of 22,775 for Criteria:ALL:denture Office(s):all Language:EN Stemming: true

prev 1 2 3 4 5 6 7 8 9 10 next Page: 1 / 2278 Go >

Refine Search ALL:denture

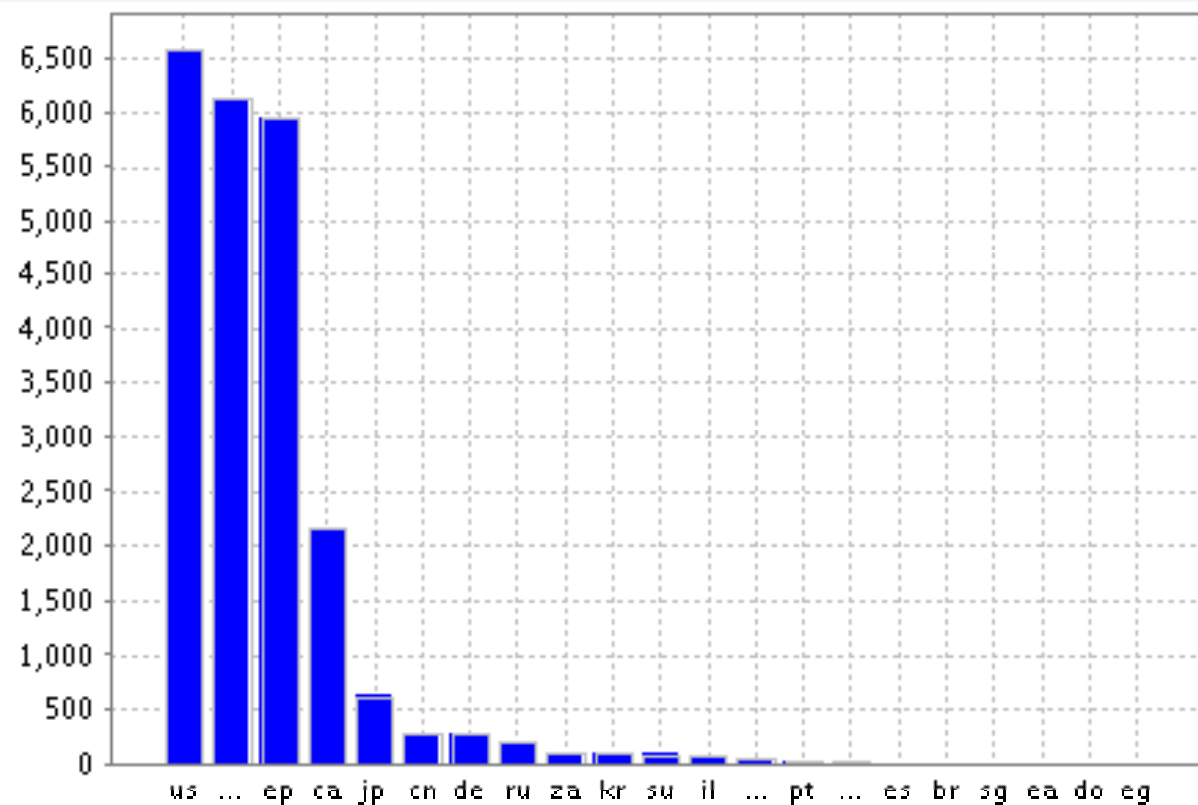
Search RSS

Analysis

Sort by: Pub Date Desc View All List Length 10 Machine translation

Int.Class	Appl.No	Title	Applicant	Ctr	PubDate
					Inventor
1. WO/2015/056857		DISPOSABLE EDENTULOUS TRAY AND METHOD FOR PRODUCING COMPLETE DENTURE USING SAME		WO	23.04.2015
A61C 9/00	PCT/KR2014/003847	LEE, Su Bin			LEE, Su Bin
The present invention relates to a disposable edentulous tray and a method for producing a denture using the same and, particularly, to a new form of a disposable edentulous tray and a method for producing a complete denture using the same, the disposable edentulous tray being capable of simplifying the operating process of the complete denture for a patient in an edentulous state (the state of having no teeth) by using the disposable edentulous tray in a most similar form to the gum condition of the patient; acquiring an accurate impression; and resolving patient discomfort by simplifying manufacturing steps and thus reducing the number of patient hospital visit days.					
2. WO/2015/055472		MOTOR VEHICLE DRIVE DEVICE		WO	23.04.2015
B60K 6/08	PCT/EP2014/071484	SOCIETE ALBIGEOISE DE FABRICATION ET REPARATION AUTOMOBILE - SAFRA			DELAMOUR, Dominique
The invention relates to a drive device (3) for a transport motor vehicle (1), comprising at least one hydraulic drive module (M1) and a main electrical drive module (M3), a coupling unit (4) and an output shaft (5) suitable for being driven by the hydraulic drive module (M1) and/or the main electrical drive module (M3) via said coupling unit (4), the hydraulic drive module (M1) and the main electrical drive module (M3) being connected directly to said coupling unit (4). The driving device (3) further comprises an energy input module (M2) connected directly to the hydraulic drive module (M1).					
3. WO/2015/055188		BEARING ASSEMBLY FOR A PLANETARY GEARING OF A WIND TURBINE		WO	23.04.2015
F03D 11/00	PCT/DE2014/200428	SCHAEFFLER TECHNOLOGIES AG & CO. KG			ENS, Andreas
The invention relates to a bearing assembly for a planetary gearing (1, 25), in particular for a planetary gearing of a wind turbine, comprising: a planet carrier (6) fixedly connected to a shaft, a gearing housing (2), in which the planet carrier (6) is arranged, an inner arrangement of teeth (3) of the gearing housing (2), planet gears (4, 5), which mesh with the inner arrangement of teeth (3), a sun gear (10), which meshes with the planet gears (4, 5), bearings arranged on both end faces of the planet gears (4, 5) for supporting the planet carrier (6) in the gearing housing (2), wherein both bearings are designed as cylindrical roller bearings (11, 12, 26, 27), wherein at least one cylindrical roller bearing (11, 12, 26, 27) has an inner or outer ring (13, 16) having two rims (14, 15), wherein the other ring has an angled ring (17) or a loose rim (29).					
4. WO/2015/056196		TREATING MUCOSAL LESIONS WITH HYALURONAN DELIVERED FROM AN ADHERING TROCHE		WO	23.04.2015
A61K 9/00	PCT/IB2014/065345	ORAHEALTH CORPORATION			HALEY, Jeffrey
A troche comprising at least 5 mg hyaluronan, wherein the troche is adherent, and wherein hyaluronan is released from the troche, is used to treat mucositis, including stomatitis, vestibulitis, aphthous ulcerations, lichen planus and Behcet's syndrome, A method for treating or preventing mucositis in a patient is provided, comprising applying to a mucosal surface or a tooth or orthodontic brace of a patient in need thereof an adhering troche comprising at least 5 mg hyaluronan.					

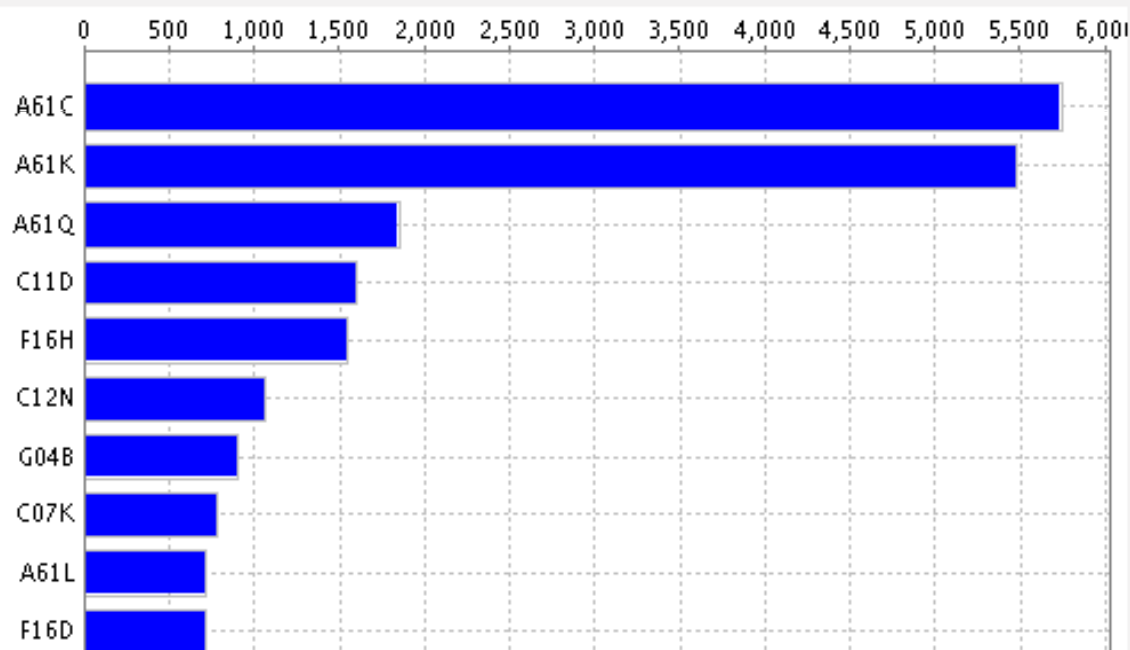
Countries	Main IPC	Main Applicant	Main Applicant	Main Inventor	Pub Date
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Countries	
Name	No
United States	6587
PCT	6127
European Patent Office	5949
Canada	2163
Japan	629
China	281
Germany	278
Russian Federation	203
South Africa	113
Republic of Korea	109
Russian Federation (USSR data)	97
Israel	82
Mexico	50

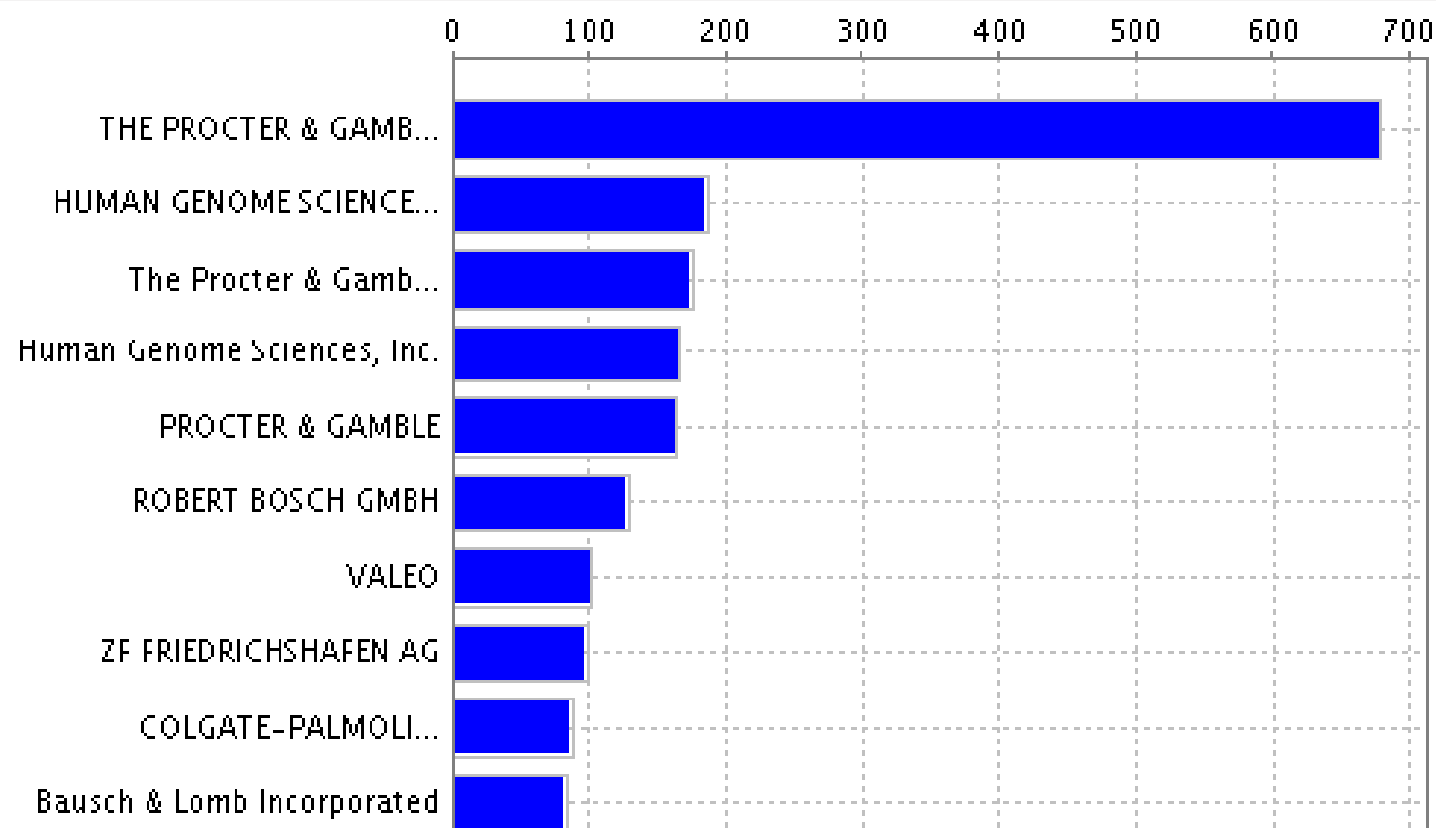
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Countries Main IPC Main Applicant Main Applicant Main Inventor Pub Date



No	
Name	No
A61C	5739
A61K	5475
A61Q	1848
C11D	1603
F16H	1549
C12N	1057
G04B	901
C07K	781
A61L	709
F16D	709

Countries	Main IPC	Main Applicant	Main Applicant	Main Inventor	Pub Date
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Main Applicant

Name	No
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678

186

175

166

163

128

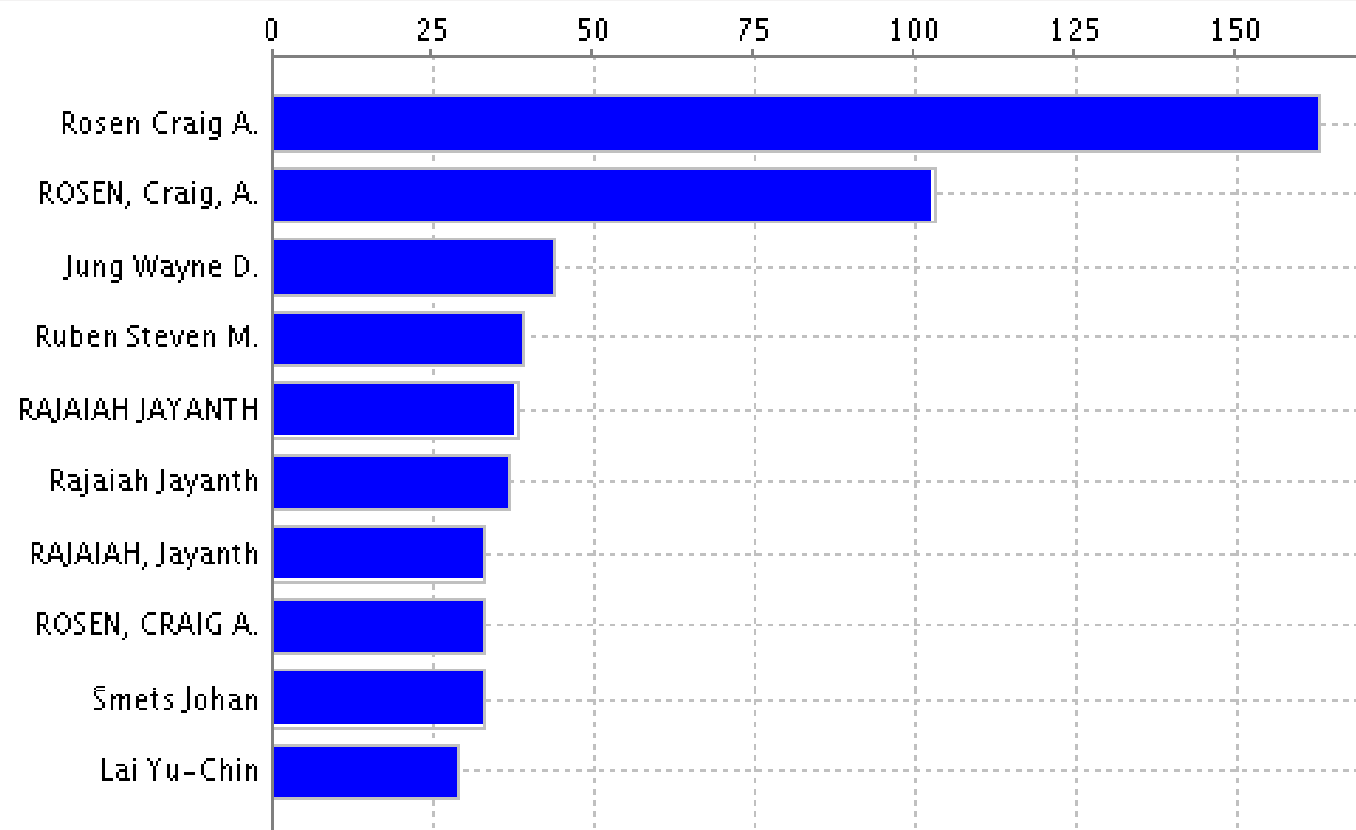
101

98

87

83

Countries	Main IPC	Main Applicant	Main Applicant	Main Inventor	Pub Date
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Main Inventor	
Name	No
Rosen Craig A.	163
ROSEN, Craig, A.	103
Jung Wayne D.	44
Ruben Steven M.	39
RAJALAH JAYANTH	38
Rajaiah Jayanth	37
RAJALAH, Jayanth	33
ROSEN, CRAIG A.	33
Smets Johan	33
Lai Yu-Chin	29

Countries

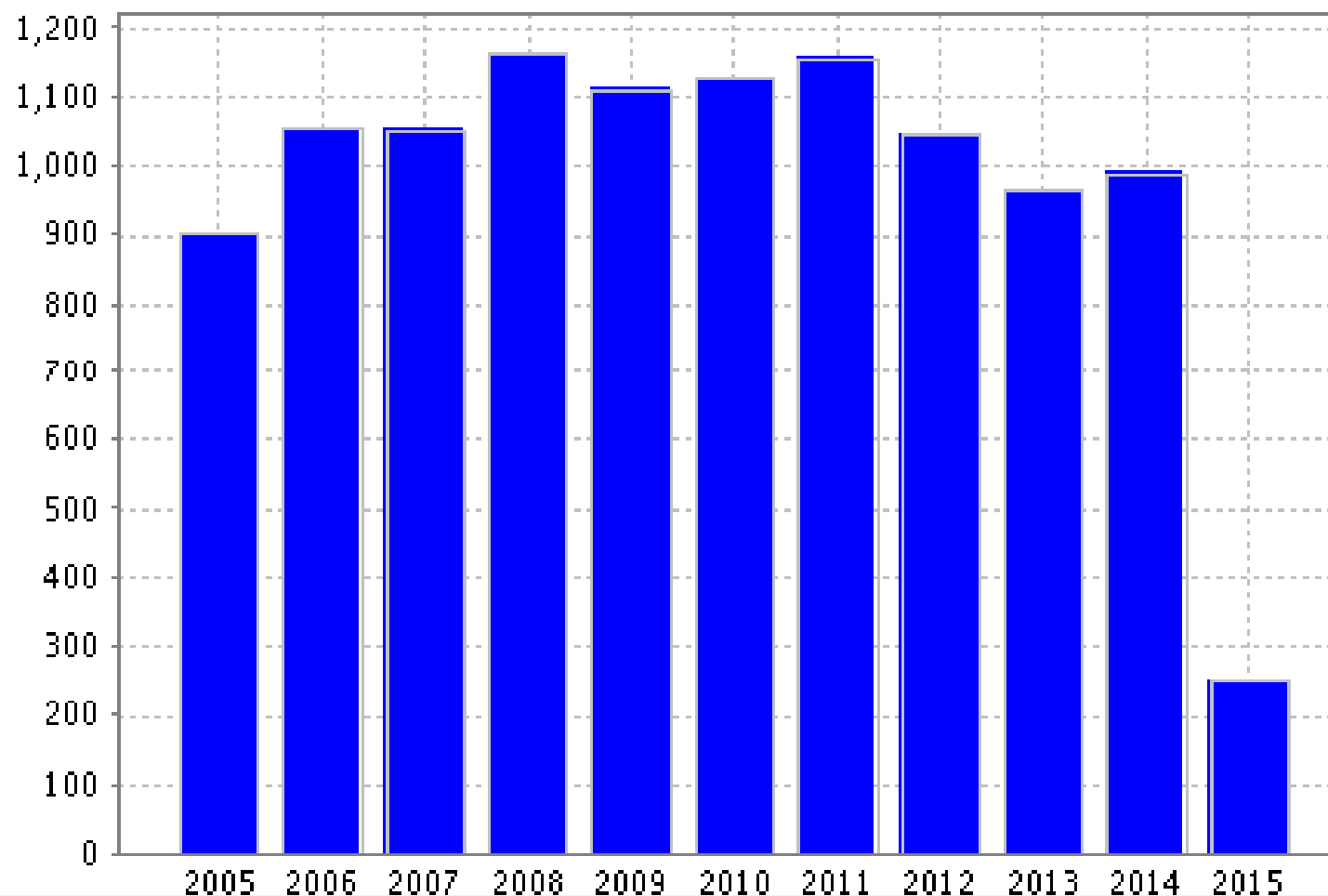
Main IPC

Main Applicant

Main Applicant

Main Inventor

Pub Date



Pub Date

Date No

2005 903

2006 1054

2007 1053

2008 1164

2009 1112

2010 1126

2011 1157

2012 1046

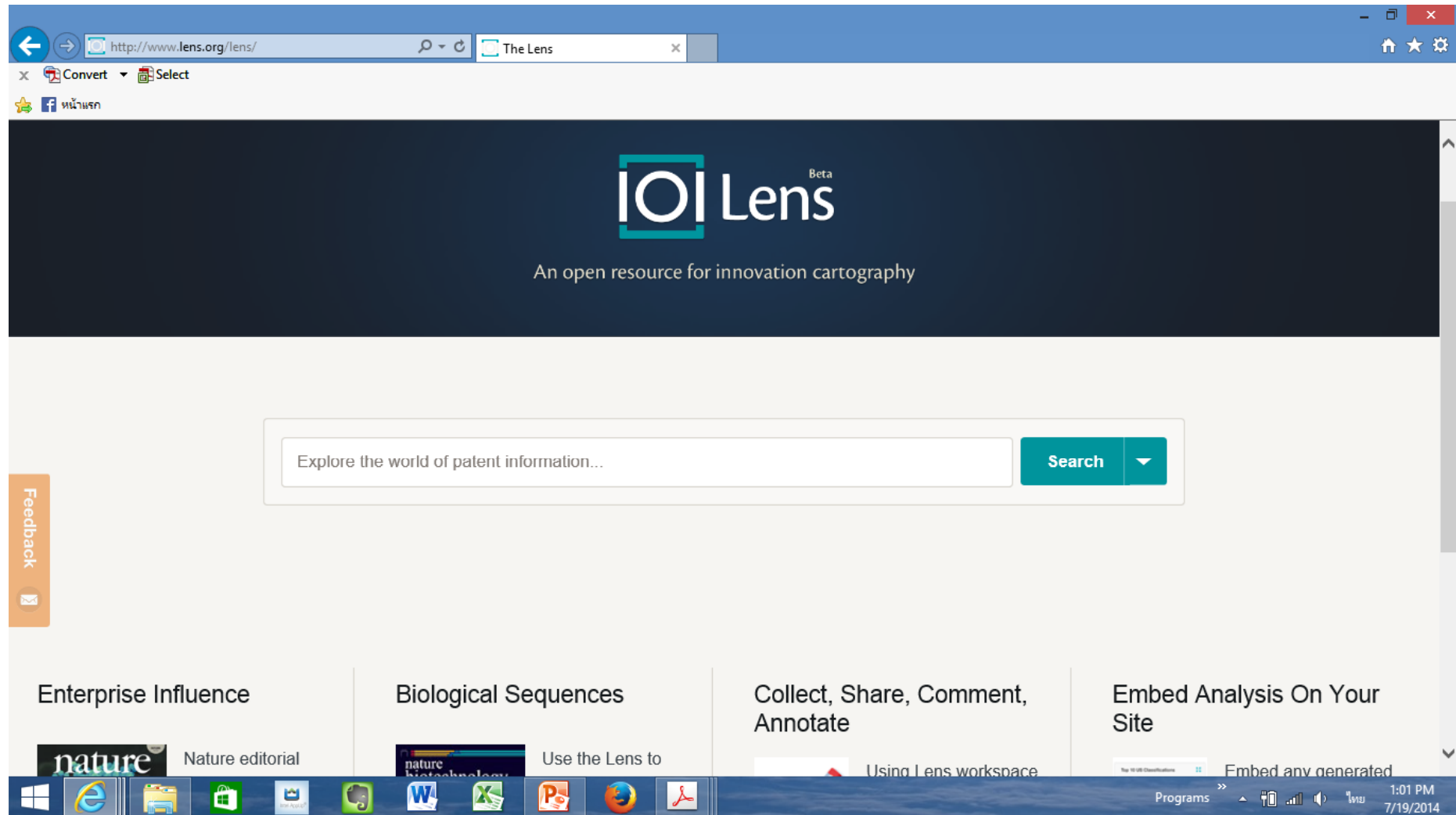
2013 966

2014 990

2015 252

PATENT LENS


Patent Lens: Free Based Patent Searching Tool



denture - The Lens

akkharawit

[←](#) [→](#) [↻](#) <https://www.lens.org/lens/search?q=denture> [★](#) [☰](#)

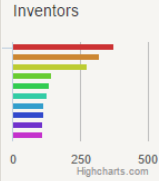
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Results Analysis

Inventors



Highcharts.com

Jurisdictions



Highcharts.com

Refine Search

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Dates

Jurisdictions

Inventors

Owners (US)

Applicants

Cited Authors

Cited Articles (PubMed)

Cited Articles (CR)

Document Families


Classifications

Document Types

Biologicals



Collections




Query Tools

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
















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
  

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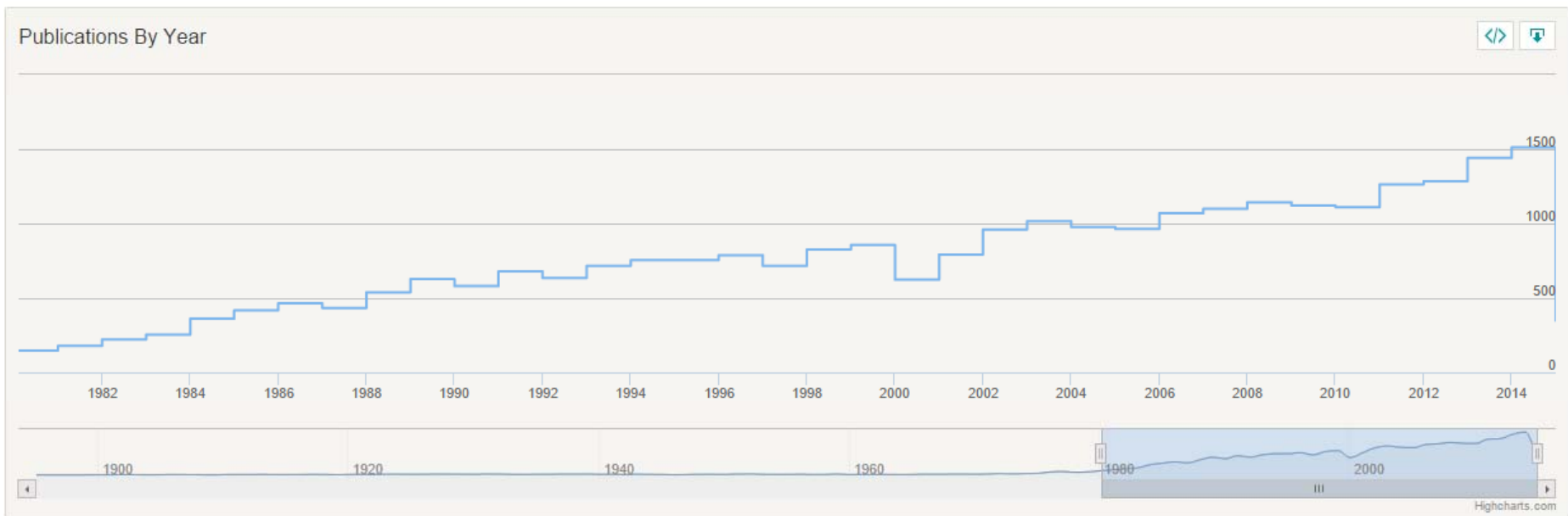
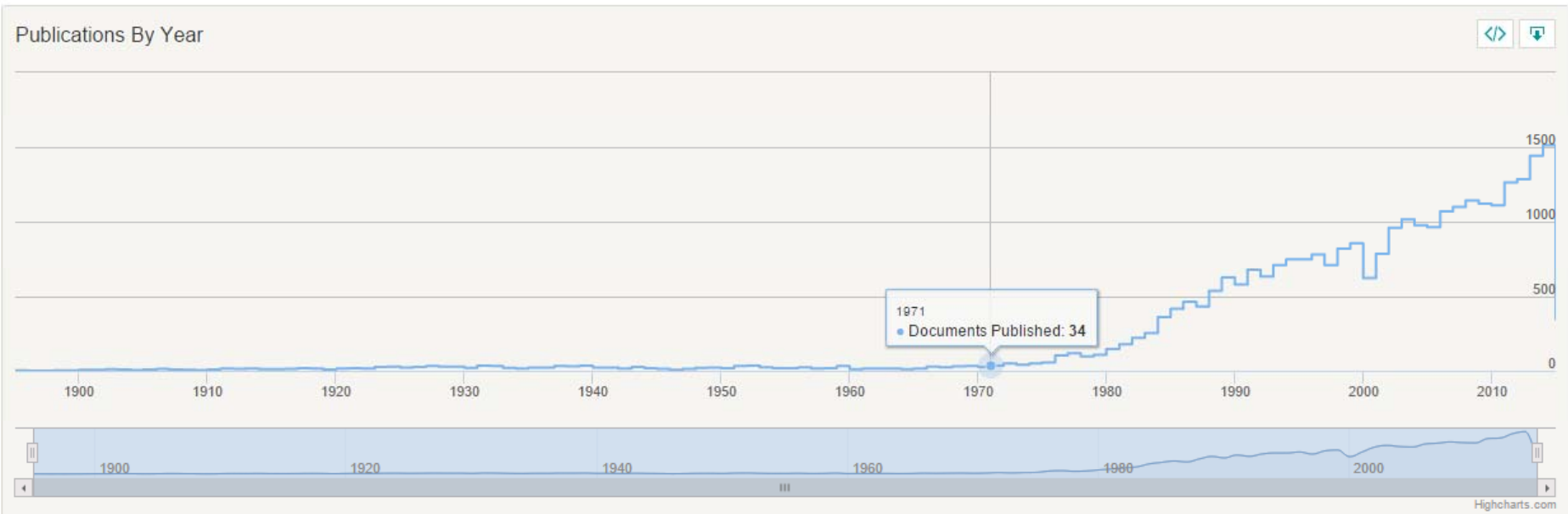
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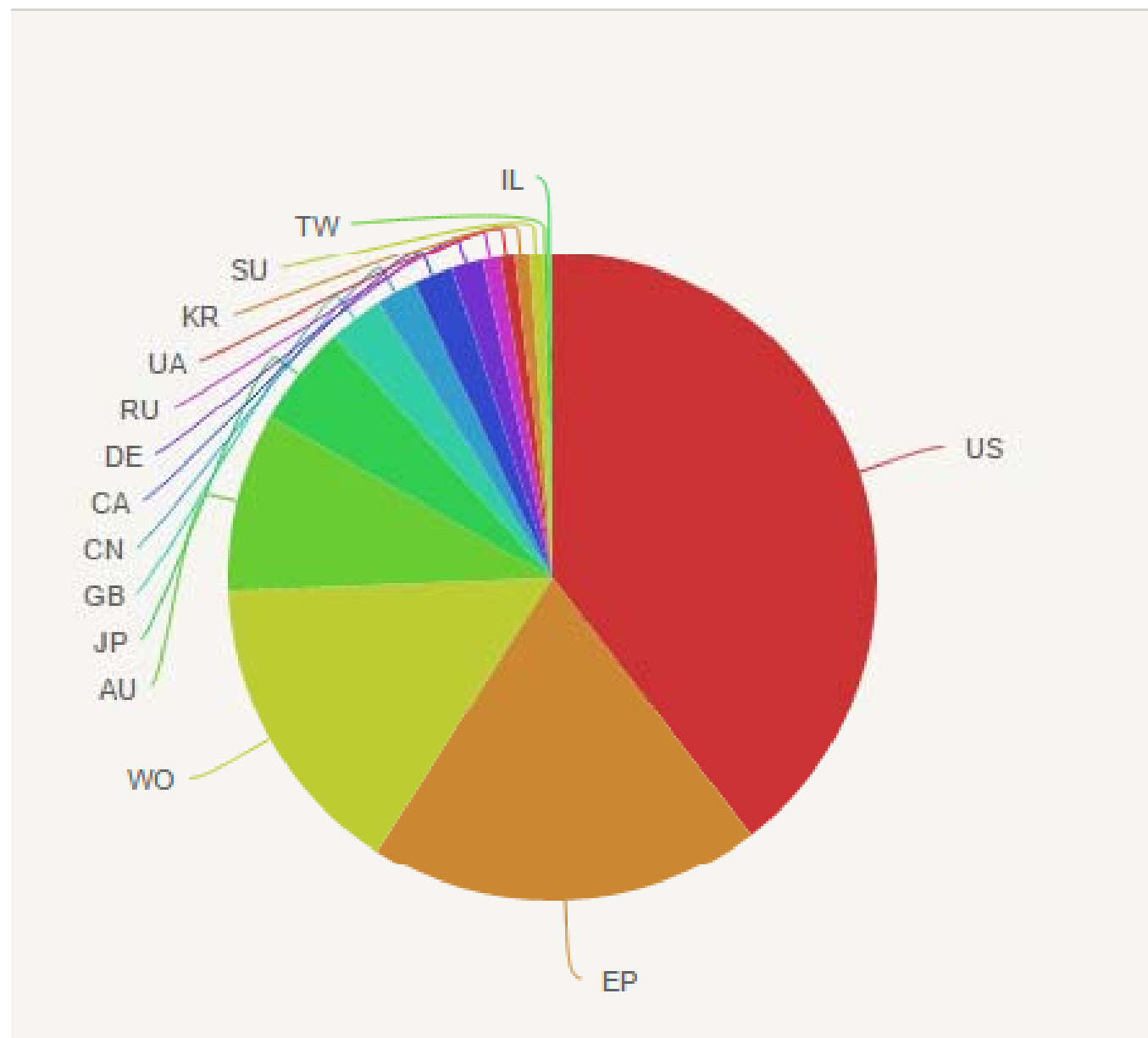
	<div>System And Process For Duplication Of Dentures</div> <div>Family: 6 Cited: 0 Info: </div> <div>Applicant: Thompson Timothy C</div>	<div>US 2015/0037760 A1</div> <div> Patent Application</div> <div>Published: Feb 5, 2015</div>
	<div>System And Process For Duplication Of Dentures</div> <div>Family: 6 Cited: 1 Info: </div> <div>Owner: Global Dental Science Lic</div>	<div>US 2013/0209962 A1</div> <div> Patent Application</div> <div>Published: Aug 15, 2013</div>
	<div>Method Of Applying A Denture Adhesive</div> <div>Family: 6 Cited: 1 Info: </div> <div>Applicant: Smithkline Beecham Corp Corpor</div>	<div>US 2007/0196787 A1</div> <div> Patent Application</div> <div>Published: Aug 23, 2007</div>
	<div>Method Of Applying A Denture Adhesive</div> <div>Family: 6 Cited: 11 Info: </div> <div>Applicant: Smithkline Beecham Corp, Smetana Alfred ...</div>	<div>WO 2005/081935 A2</div> <div> Patent Application</div> <div>Published: Sep 9, 2005</div>
	<div>System And Process For Duplication Of Dentures</div> <div>Family: 6 Cited: 1 Info: </div> <div>Applicant: Global Dental Science, Thompson Timothy...</div>	<div>WO 2012/061659 A2</div> <div> Patent Application</div> <div>Published: May 10, 2012</div>
	<div>Denture Adhesive</div> <div>Family: 34 Cited: 0 Info: </div> <div>Applicant: Block Drug Co</div>	<div>EP 0774949 B1</div> <div> Granted Patent</div> <div>Published: Oct 19, 2005</div>

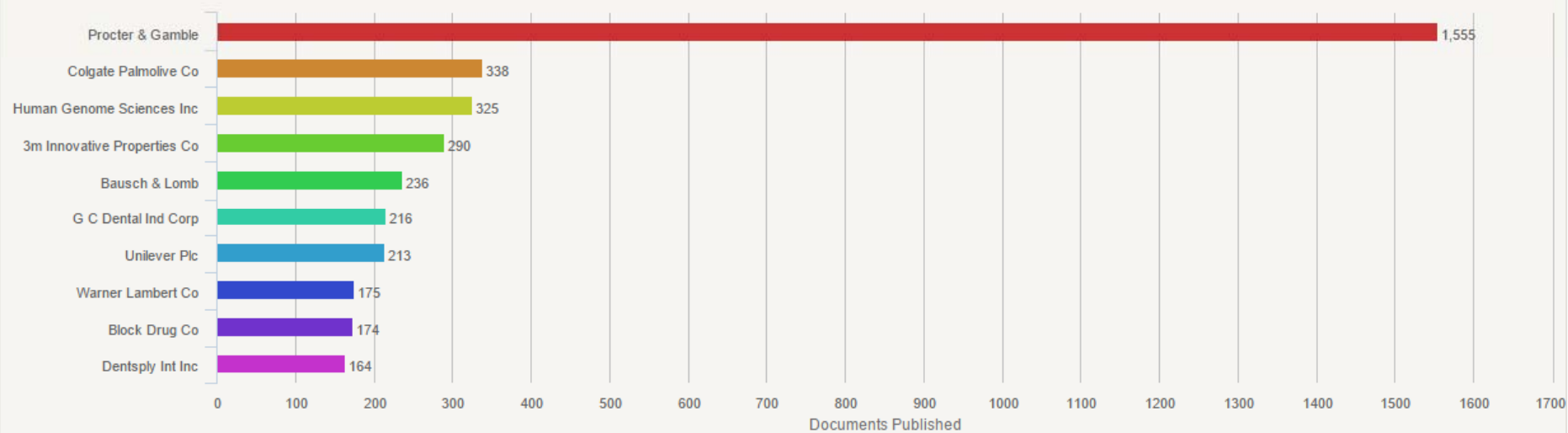
    

ENG 10:54 27/4/2558



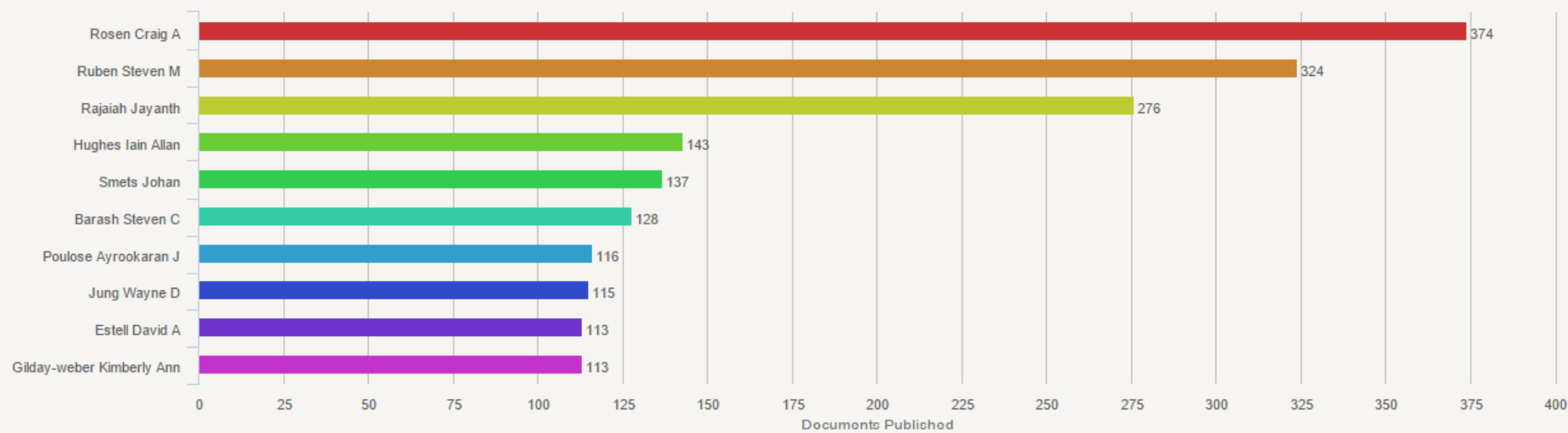


Applicants

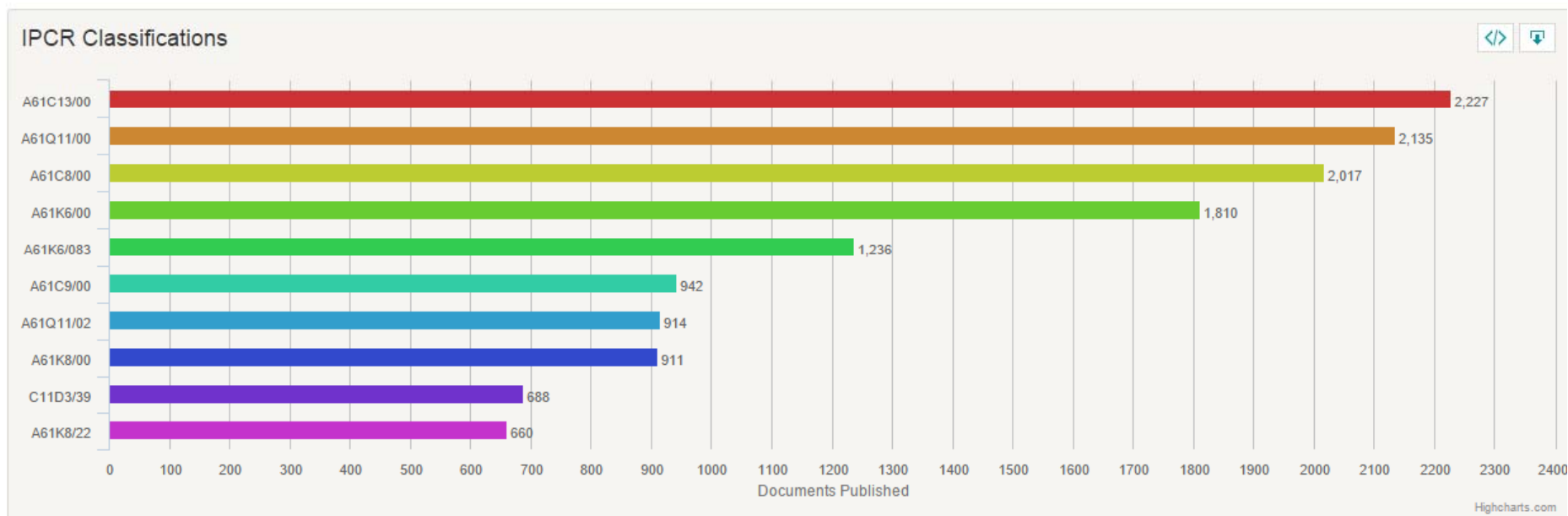


Highcharts.com

Inventors



Highcharts.com



[A61C 13/00](#) Dental prostheses; Making same (tooth crowns for capping teeth [A61C 5/08](#);
dental implants [A61C 8/00](#)) [\[2006.01\]](#)

[A61Q 11/00](#) [Preparations](#) for care of the teeth, of the oral cavity or of dentures, e.g. dentifrices or
toothpastes; Mouth rinses [\[2006.01\]](#)

[A61C 8/00](#) Means to be fixed to the jaw-bone for consolidating natural teeth or for fixing dental prostheses
thereon; Dental implants; Implanting tools (fastening of peg-teeth in the mouth [A61C 13/30](#)) [\[2006.01\]](#)

[A61K 6/00](#) [Preparations](#) for dentistry (teeth cleaning [preparations A61K 8/00](#), [A61Q 11/00](#); fastening dental
prostheses in the mouth using adhesive foils or adhesive compositions [A61C 13/23](#)) [\[2006.01\]](#)

[A61K 6/083](#)

· · · Compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [\[2006.01\]](#)

[A61C 9/00](#) Impression methods specially adapted for dental prosthetics; Impression cups therefor [\[2006.01\]](#)

Patentability/Prior Art Search

- Patentability
 - New (Exactly the same)
 - Title
 - Abstract
 - Claims
 - Detailed description
 - Inventive step (Similar or related to)
 - Claims
 - Detailed description

ความใหม่ (Novelty)

การประดิษฐ์ขึ้นใหม่ได้แก่การประดิษฐ์ที่ไม่เป็นงานที่ปรากฏอยู่แล้ว โดยงานที่ปรากฏอยู่แล้วได้แก่

- (1) การประดิษฐ์ที่มีใช้หรือแพร่หลายอยู่แล้วในราชอาณาจักรก่อนวันขอรับสิทธิบัตร
- (2) การประดิษฐ์ที่ได้มีการเปิดเผยสาระสำคัญหรือรายละเอียดในเอกสารหรือสิ่งพิมพ์ที่ได้เผยแพร่อยู่แล้วไม่ว่าในหรือนอกราชอาณาจักรก่อนวันขอรับสิทธิบัตร และไม่ว่าการเปิดเผยนั้นจะกระทำโดยเอกสาร สิ่งพิมพ์ การนำออกแสดง หรือการเปิดเผยต่อสาธารณชนด้วยประการใดๆ

Confidential Disclosure Agreement (CDA), Non Disclosure Agreement (NDA)

ความใหม่ (Novelty)

- (3) การประดิษฐ์ที่ได้รับสิทธิบัตรหรืออนุสิทธิบัตรแล้วไม่ว่าในหรือนอกราชอาณาจักรก่อนวันขอรับสิทธิบัตร
- (4) การประดิษฐ์ที่มีผู้ขอรับสิทธิบัตรหรืออนุสิทธิบัตรไว้แล้วนอกราชอาณาจักรเป็นเวลาเกิน 18 เดือนก่อนวันขอรับสิทธิบัตรแต่ยังมิได้มีการออกสิทธิบัตรหรืออนุสิทธิบัตรให้
- (5) การประดิษฐ์ที่มีผู้ขอรับสิทธิบัตรหรืออนุสิทธิบัตรไว้แล้วไม่ว่าในหรือนอกราชอาณาจักรและได้ประกาศโฆษณาแล้วก่อนวันขอรับสิทธิบัตรในราชอาณาจักร

Paris Convention or Patent Cooperation Treaty (PCT)

ขั้นตอนการประดิษฐ์ที่สูงขึ้น (Inventive Step) มาตรา 7

- การประดิษฐ์ที่ไม่เป็นที่ประจักษ์โดยง่ายแก่บุคคลที่มีความชำนาญในระดับสามัญสำหรับงานประเภทนั้น
(Non-obviousness)
- Non-obviousness
 - ผลที่ไม่คาดหวัง (unexpected results): Cyclosporin, แอสไพริน
 - การรายงานก่อนหน้านี้ที่ให้ผลตรงกันข้าม
 - มีขั้นตอนการทดลอง ศึกษา วิจัยหลายขั้นตอน กระบวนการ

สืบค้นเพื่อรวบรวมข้อมูลทางธุรกิจ

Gathering Business Intelligence

- Relevant information:
 - Applicants: Inventor, companies
 - Strategic trends, development (in specific technical fields or by companies, etc.)
 - National and regional strengths and weakness in know-how
- Monitor developments by using
 - Graphical analysis (graphs, maps)
 - RSS feeds (automatic indication of new information availability)

BRAUN

Structured Search

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Query Predicate: **AND** ▼

Braun

in **Applicants** ▼ **-**

First Name

Last Name

in **Inventors** ▼ **+** **-**

Dates:

Documents That Were: ☒ Published ☐ Filed

between

and

Jurisdictions

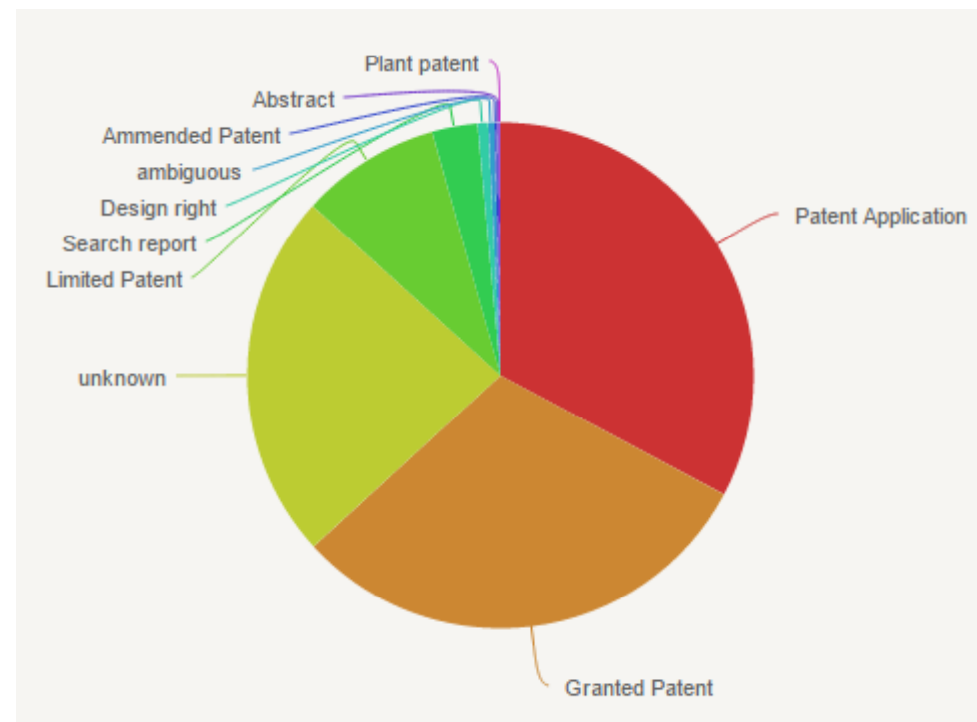
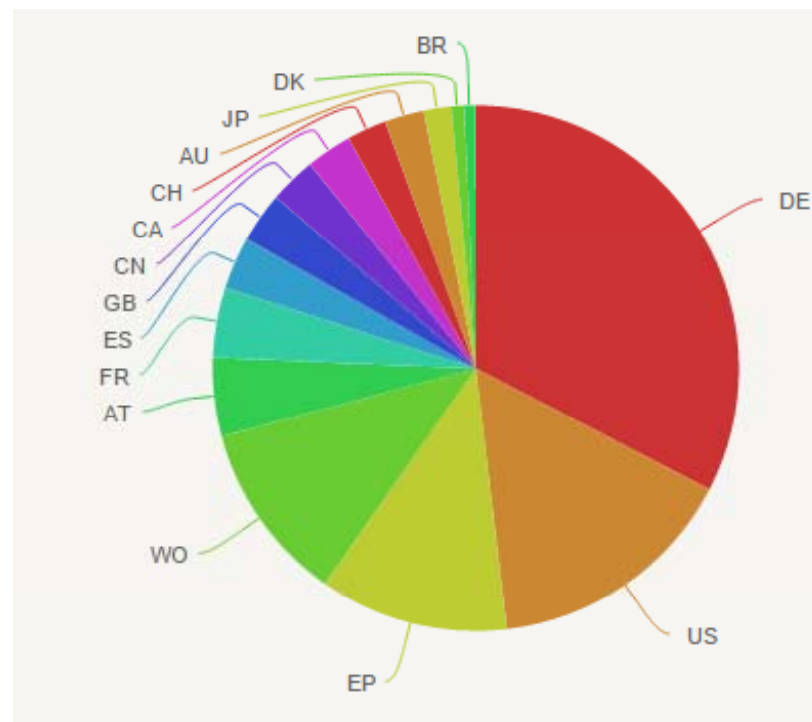
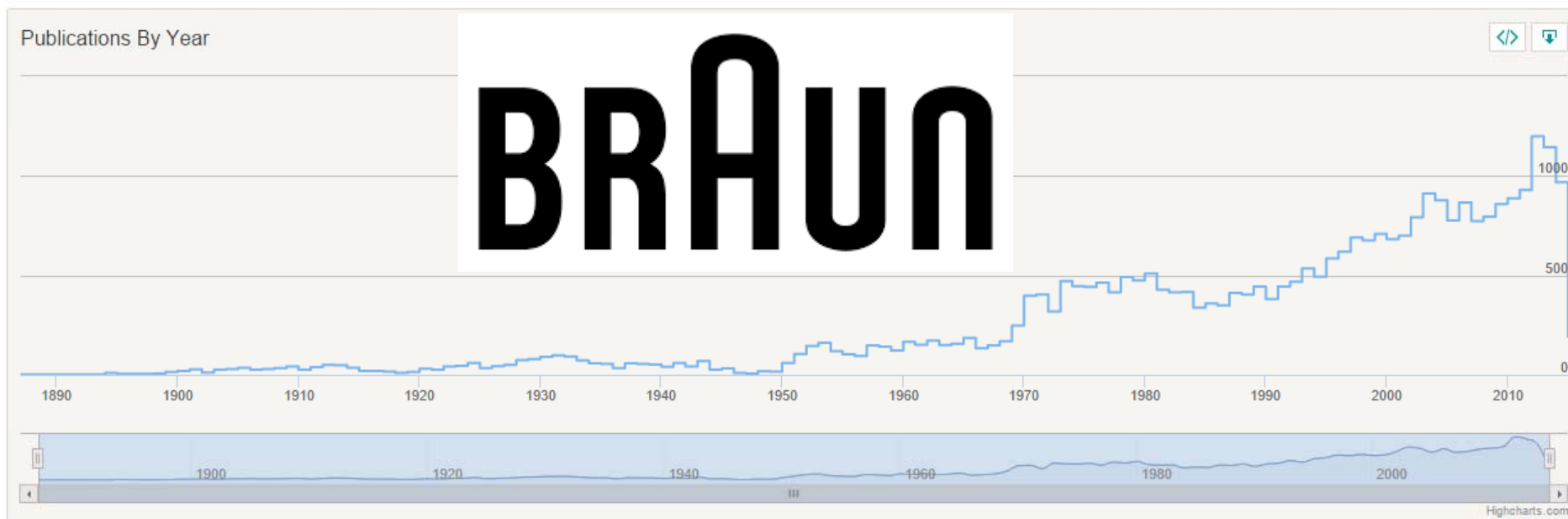
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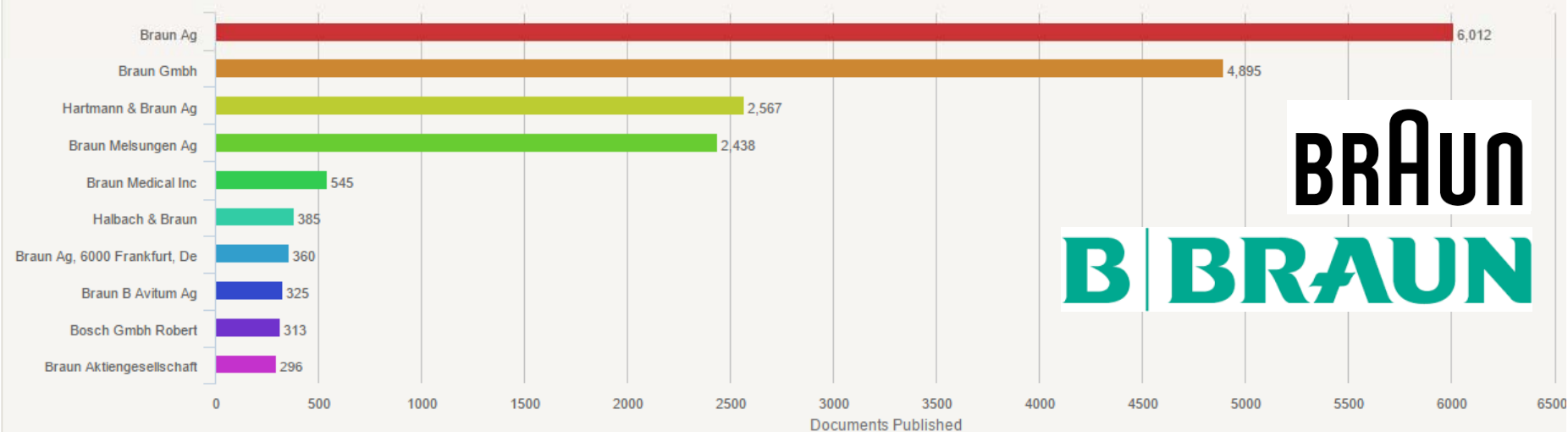
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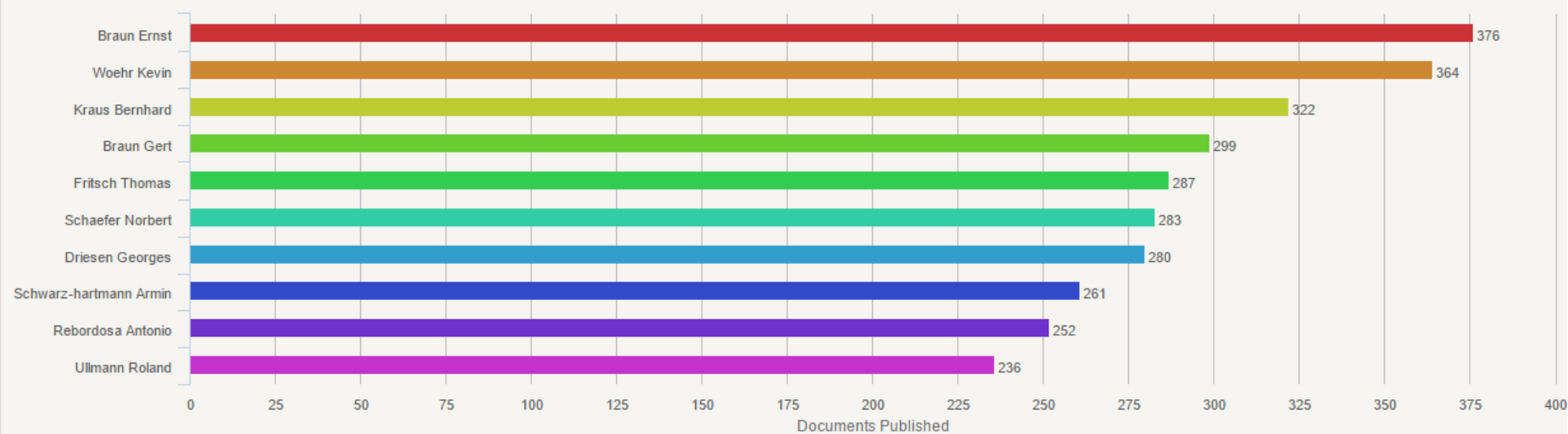
- | | | |
|---|---|---|
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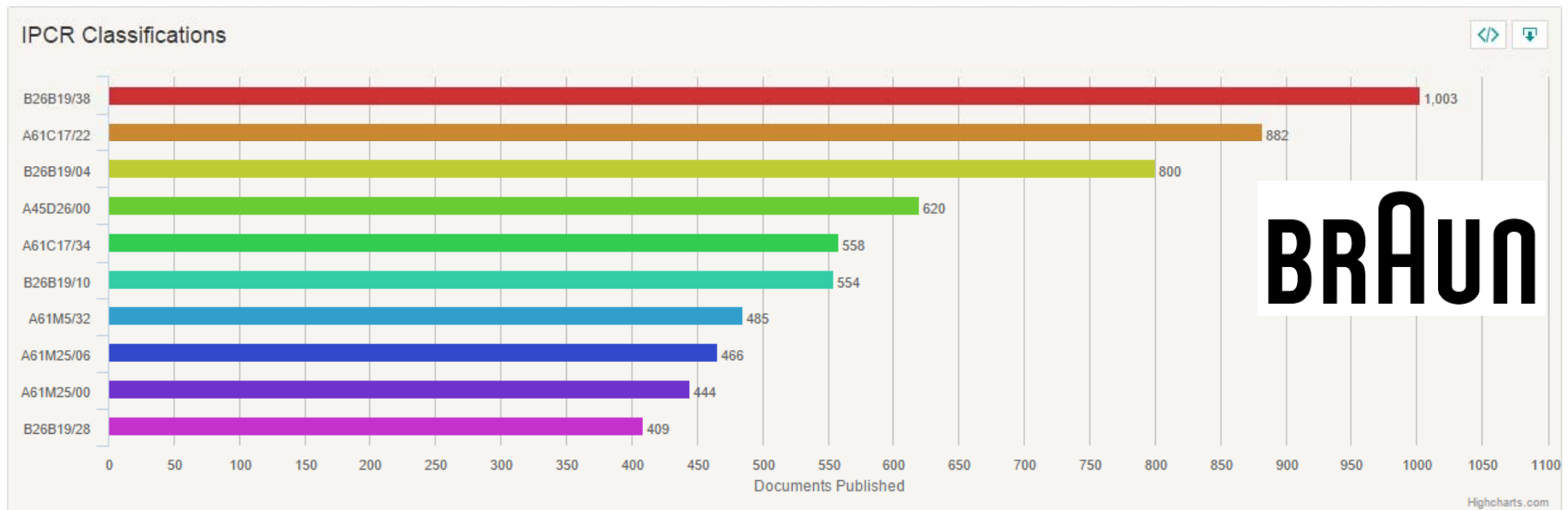


Applicants



Inventors





[B26B 19/38](#)

•Details of, or accessories for, hair clippers, or dry shavers, e.g. housings, casings, grips, guards (cutters, cutting heads....



[A61C 17/00](#)

Devices for cleaning, polishing, rinsing or drying teeth, teeth cavities or prostheses (instruments acting like a sandblast machine ..

[A61C 17/22](#)

• •with brushes, cushions, cups or the like (brush bodies, e.g. arrangements of the bristles



[B26B 19/00](#)

Clippers or shavers operating with a plurality of cutting edges, e.g. hair clippers, dry shavers



Cott

[54]
[75]

[73]
[21]
[22]
[30]

Ar
[51]
[52]
[58]
[56]

United States Patent [19]

Cottenceau et al.

[54] POSSIBLY ABSORBABLE BLOOD FILTER

[75] Inventors: Jean-Philippe Cottenceau, Antony;
Gérard Chevillon, Montrouge;
Maurice Roussigne; Guy Nadal, both
of Poitiers, all of France

[73] Assignee: B. Braun Celsa, Chasseneuil, France

[21] Appl. No.: 40,259

[22] Filed: Mar. 30, 1993

[30] Foreign Application Priority Data

Apr. 7, 1992 [FR] France 92 04226

[51] Int. Cl.⁵ A61M 29/00; A61B 19/00

[52] U.S. Cl. 128/899; 606/194;
606/200

[58] Field of Search 128/897-899;
606/191, 194, 198, 200

[56] References Cited

U.S. PATENT DOCUMENTS

4,727,873	3/1988	Mobin-Uddin	606/200
4,817,600	4/1989	Herns et al.	606/198
4,873,978	10/1989	Ginsburg	606/200
4,990,156	2/1991	Lefebvre	606/200
5,035,706	7/1991	Giantureo et al.	606/198

US005375612A

[11] Patent Number: 5,375,612

[45] Date of Patent: Dec. 27, 1994

5,108,418 4/1992 Lefebvre 606/200

FOREIGN PATENT DOCUMENTS

0420541	4/1991	European Pat. Off. .	
0423916	4/1991	European Pat. Off. .	
2567405	1/1986	France .	
2573646	5/1986	France	128/898
2580504	10/1986	France .	
3900517	7/1989	Germany	606/200

Primary Examiner—Lee S. Cohen

Assistant Examiner—J. P. Lacyk

Attorney, Agent, or Firm—Pollock, Vande Sande &
Priddy

[57] ABSTRACT

The invention relates to an implantable blood filter comprising a self-expanding external structure made from a zigzagged thread wound on itself in order to exhibit a closed configuration. A central strainer section is connected to the said thread at various points for the retention of possible blood clots. This strainer section may be made from a biologically absorbable material. Applications include the production of medical blood filters, which are self-centering and absorbable.

19 Claims, 3 Drawing Sheets

United States Patent [19]
Cottenceau et al.

US005375612A
[11] **Patent Number:** **5,375,612**
[45] **Date of Patent:** **Dec. 27, 1994**

[54] **POSSIBLY ABSORBABLE BLOOD FILTER**
[75] **Inventors:** Jean-Philippe Cottenceau, Antony;
Gérard Chevillon, Montrouge;
Maurice Roussigne; Guy Nadal, both
of Poitiers, all of France
[73] **Assignee:** B. Braun Celsa, Chasseneuil, France
[21] **Appl. No.:** 40,259
[22] **Filed:** Mar. 30, 1993


FOREIGN PATENT DOCUMENTS			
0420541	4/1991	European Pat. Off. .	
0423916	4/1991	European Pat. Off. .	
2567405	1/1986	France .	
2573646	5/1986	France .	128/898
2580504	10/1986	France .	
3900517	7/1989	Germany .	606/200

Primary Examiner—Lee S. Cohen

Summary Full-text Citations **Family Info** Legal Info Notes (0)


Possibly Absorbable Blood Filter

Published: Dec 27, 1994 Family: 10 Cites: 12 Cited: 432 PDF

US 5375612 A 
Granted Patent

10 documents in this family 

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Key Trends in Technology Development

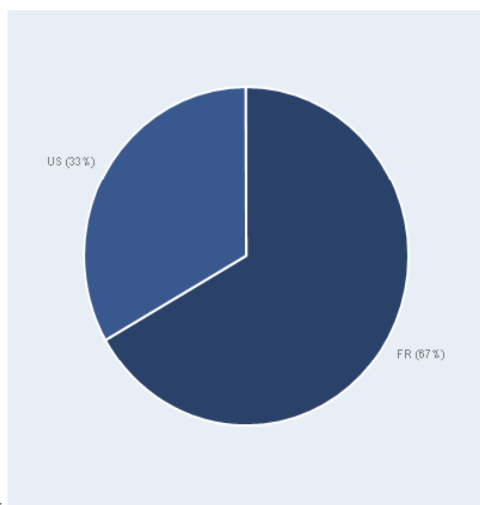
- Analyzing statistical data obtained from patent documents to map key trends in different field of technology
- Track growth and changes in;
 - Patent activity over time
 - Distribution of patent applications in a country by residents compared to non-residents
 - Identifying technical areas in which a country is predominantly active in terms of patenting activity

International Filing History of Toyota Company

International Applications by Country of Origin

COUNTRY	IAs
FR	2
US	1

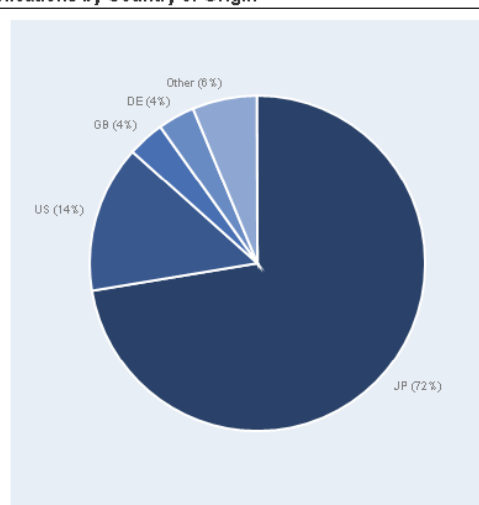
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International Applications by Country of Origin

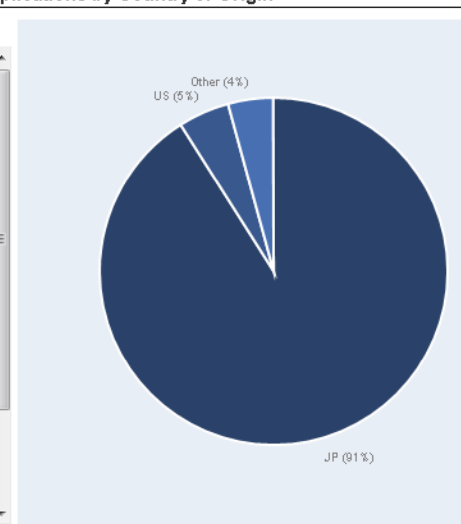
COUNTRY	IAs
JP	81
US	16
GB	4
DE	4
NL	2
SE	1
KR	1
DK	1
CH	1
BE	1

time: 240



International Applications by Country of Origin

COUNTRY	IAs
JP	1219
US	64
DE	11
GB	10
FR	4
BE	4
BB	4
AU	4
NL	3
KR	2
IT	2
IL	2
SE	1
RO	1
KE	1
ID	1
ES	1
EE	1
DK	1



International Applications by IPC subclass

IPC	IAs
1 G07C	1
2 F02M	1
3 B60T	1

F02D

CONTROLLING COMBUSTION [ENGINES](#)

H01M

PROCESSES OR MEANS, e.g.

BATTERIES, FOR THE DIRECT CONVERSION OF
CHEMICAL ENERGY INTO ELECTRICAL ENERGY

International Applications by IPC subclass

IPC	IAs
1 B01D	11
2 B01J	10
3 F02D	8
4 F01N	8
5 B60R	8
6 H01M	6
7 G01C	5
8 C23C	5
9 G01P	4
10 C22C	4
11 C12N	4
12 C10L	4
13 C08F	4
14 B29C	4
15 B09C	4
16 F23G	3

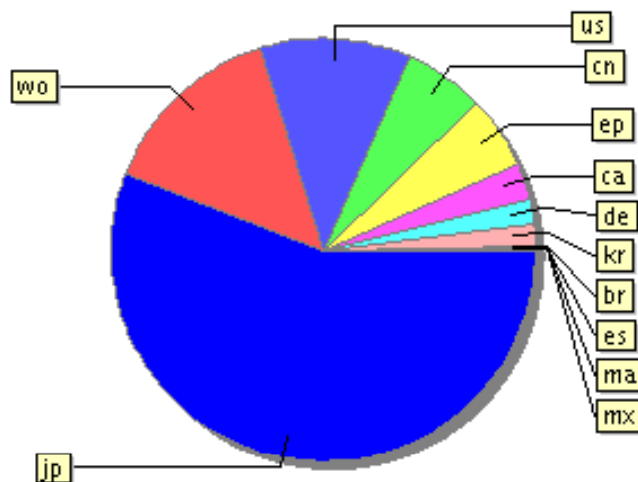
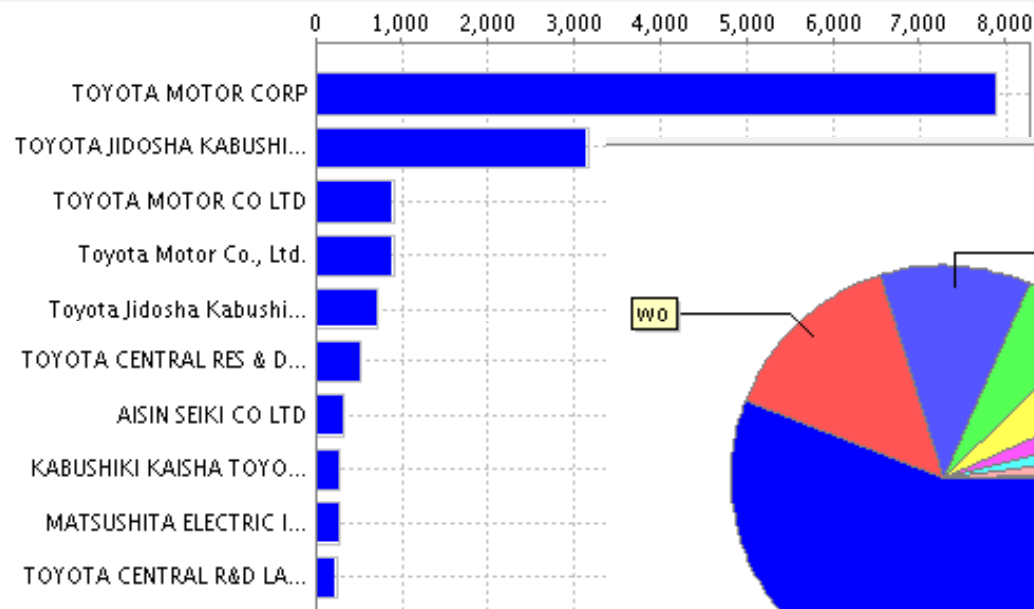
International Applications by IPC subclass

IPC	IAs
1 H01M	257
2 F02D	161
3 B60K	116
4 B60L	115
5 B60R	98
6 B60W	97
7 F01N	86
8 F16H	84
9 B62D	70
10 H02J	49
11 B01D	42
12 F02M	41
13 B60T	40
14 H02K	37
15 G08G	35
16 B01J	28

1980

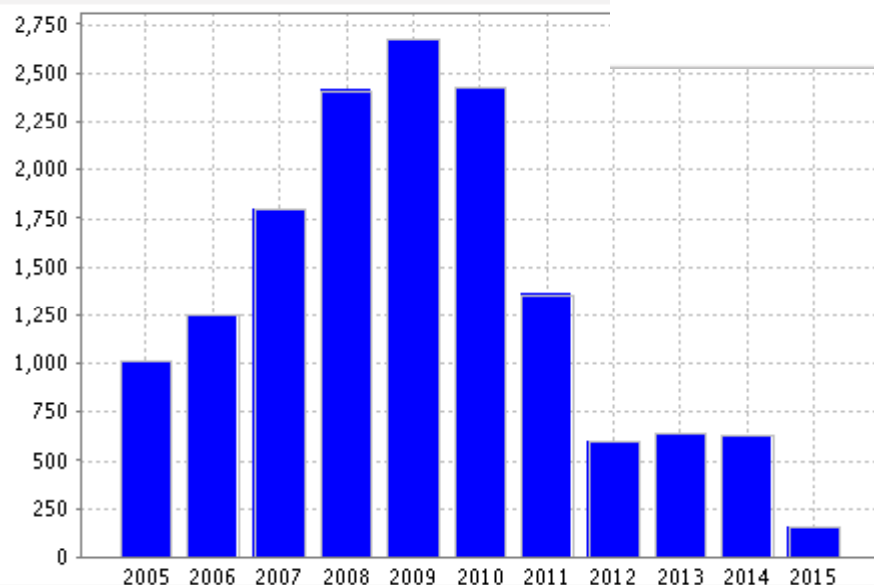
1999

2009



Countries	
Name	No
Japan	9936
PCT	2560
United States	2029
China	1084
European Patent Office	990
Canada	500
Germany	347
Republic of Korea	309
Brazil	22
Spain	8
Morocco	1
Mexico	1

Countries	Main IPC	Main Applicant	Main Applicant	Main
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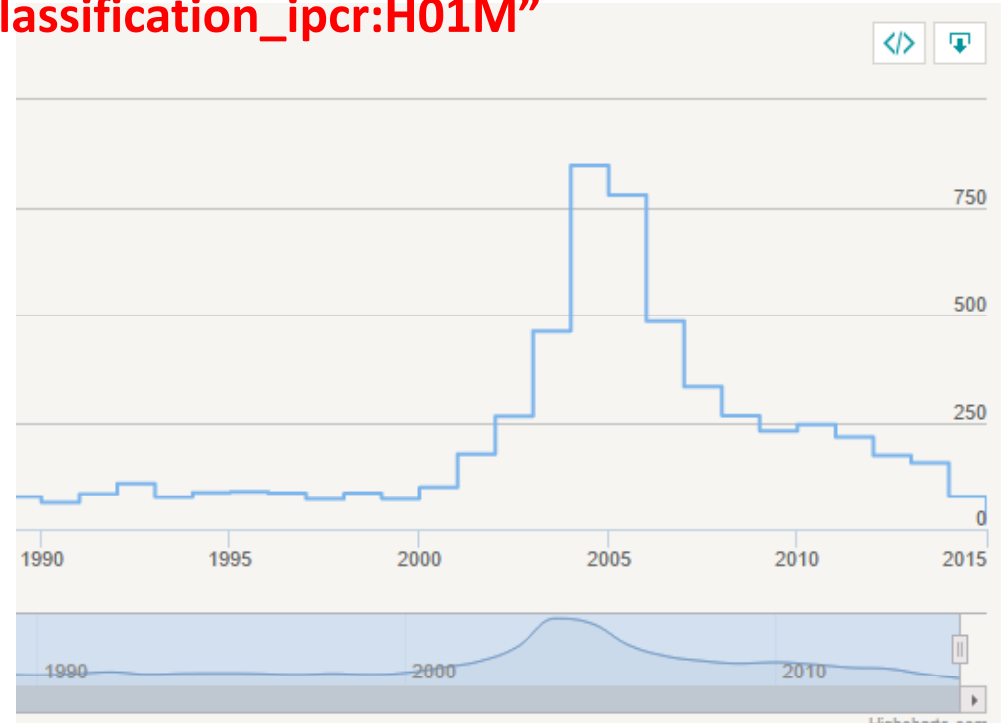
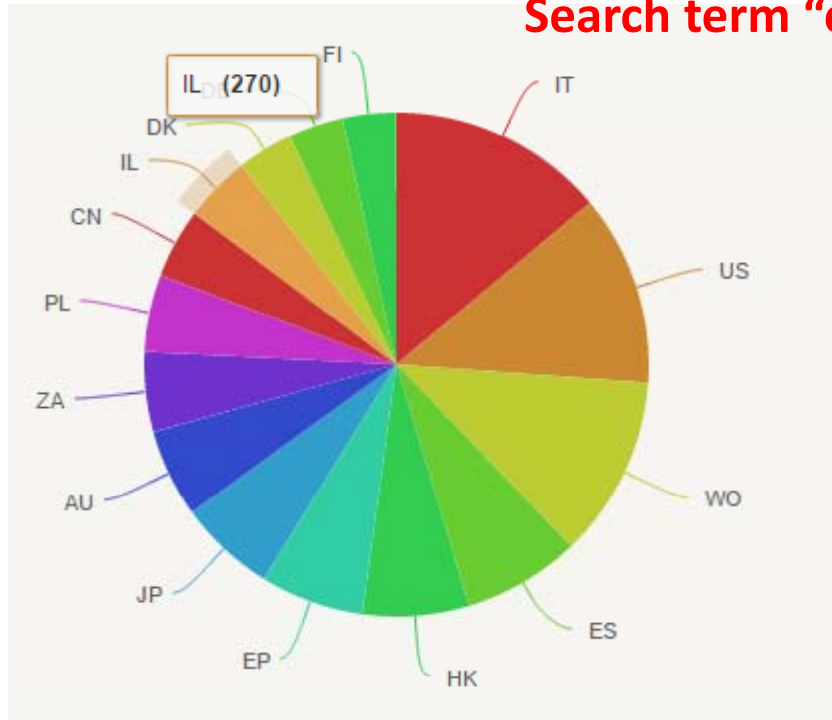
2005	1013
2006	1250
2007	1800
2008	2412
2009	2678
2010	2429
2011	1360
2012	603
2013	646
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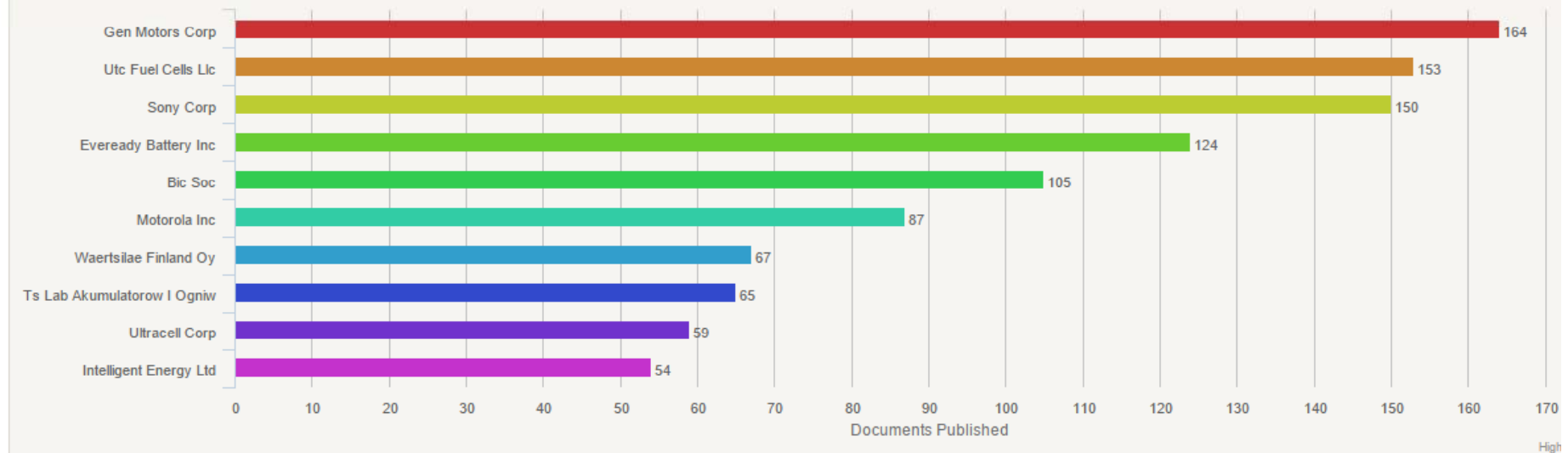
17,787 for Search Criteria:

(PA:(Toyota Mo*) OR (Toyota Re*) OR (Toyota C*) OR (Toyota)) AND IC:H01M

Search term "classification_ipcr:H01M"



Applicants



Freedom to Operate Search (FTO Search)

FTO = Right to Use

Avoiding Patent Infringement (FTO Search)

- Does your invention infringe someone else's patent?
 - Identifying legal status
 - Has the patent been granted, rejected, withdrawn or is it still pending?
 - Is the patent still valid or has it expired?
 - In which countries?
 - Appraise claims of patent (if still in force)
 - Change (improve?) own product or look into licensing

Freedom to Operate

...is an ongoing legal assessment of the intellectual property rights covering a particular technology space.

...performed to ensure that a new innovation does not infringe other's intellectual property.



May have a patent but not all the IPRs to develop a product

Rule of Infringement

- If every element of the claim is not infringed, there is no infringement
- Expired patent cannot be infringed
- A patent gives you the right to exclude the other, not the right to use the invention

Prior Art 1	Invention 1	Invention 2	Prior Art2
A	A	A	
B	B		
C	C	C	C
D	D		
	E	E	E
	F	F	

Patent Valuation

- Citations
 - Check how often the relevant document was cited in search reports
 - Check how often the relevant document was cited in later patent documents describing state of the art
 - More citations, more “value” can be associated with the base patent

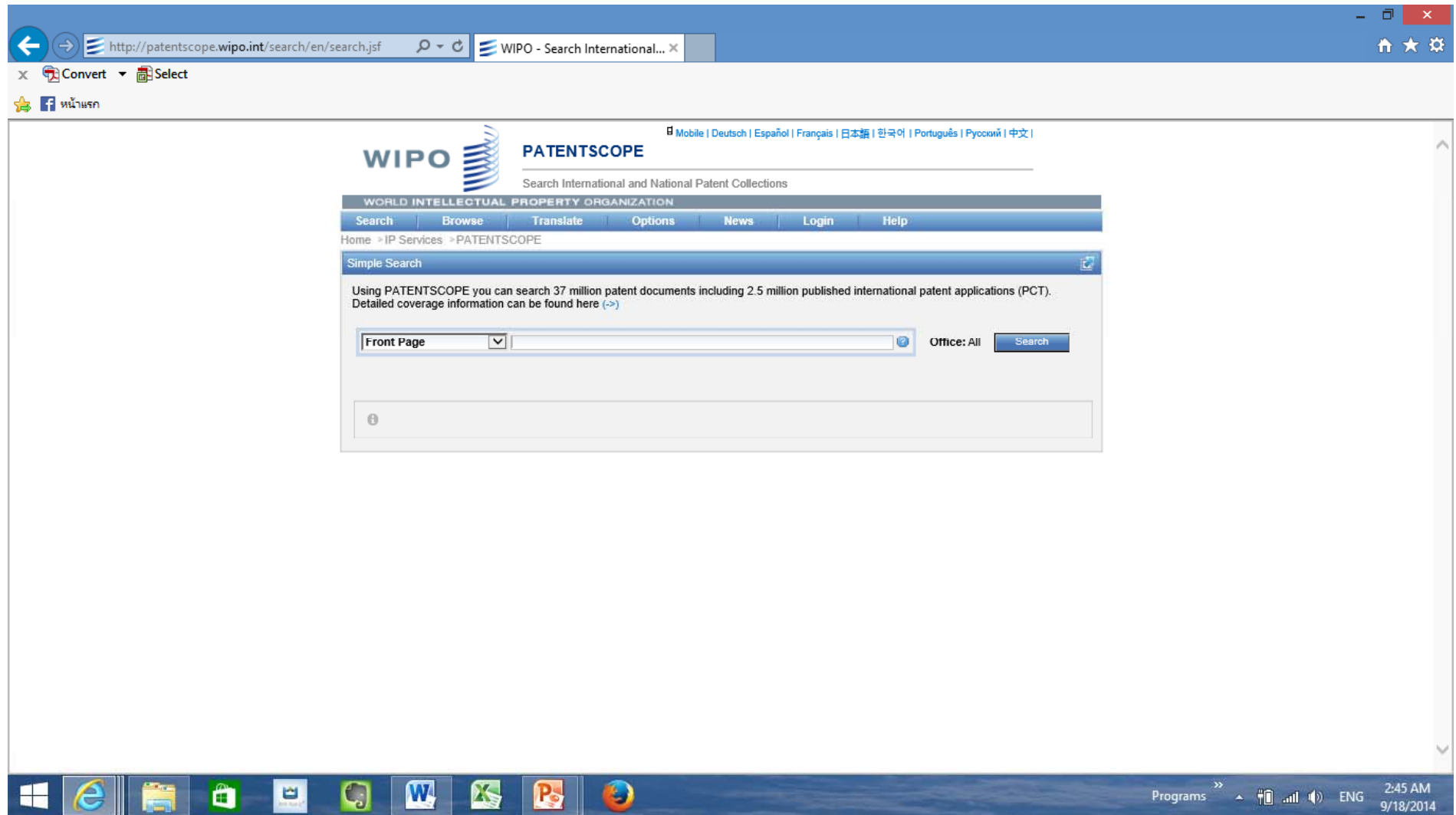
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9/18/2014

Browser window showing the WIPO PATENTSCOPE search interface. The address bar displays <http://patentscope.wipo.int/search/en/structuredSear>.

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The main search area is titled "Field Combination" and contains a table for defining search criteria:

	Front Page		
AND	WIPO Publication Number	=	
AND	Application Number	=	
AND	Publication Date	=	
AND	English Title	=	
AND	English Abstract	=	
AND	Applicant Name	=	
AND	International Class	=	
AND	Inventor Name	=	
AND	Office Code	=	
AND	English Description	=	
AND	English Claims	=	
AND	Licensing availability	=	<input type="checkbox"/>
AND	Inventor Name	Is Empty:	<input checked="" type="radio"/> N/A <input type="radio"/> Yes <input type="radio"/> No

Language: English Stem: ☒ Office: All Specify [Specify](#)

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Advanced Search: field codes

- Serial numbers
- Titles
- Abstract
- Patent classification
- Dates
- Applicant data
- Inventor data
- Legal data
- Language

Search International Patent Applications - Field Codes - Windows Internet Explorer

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Search International Patent Applications - Field Codes

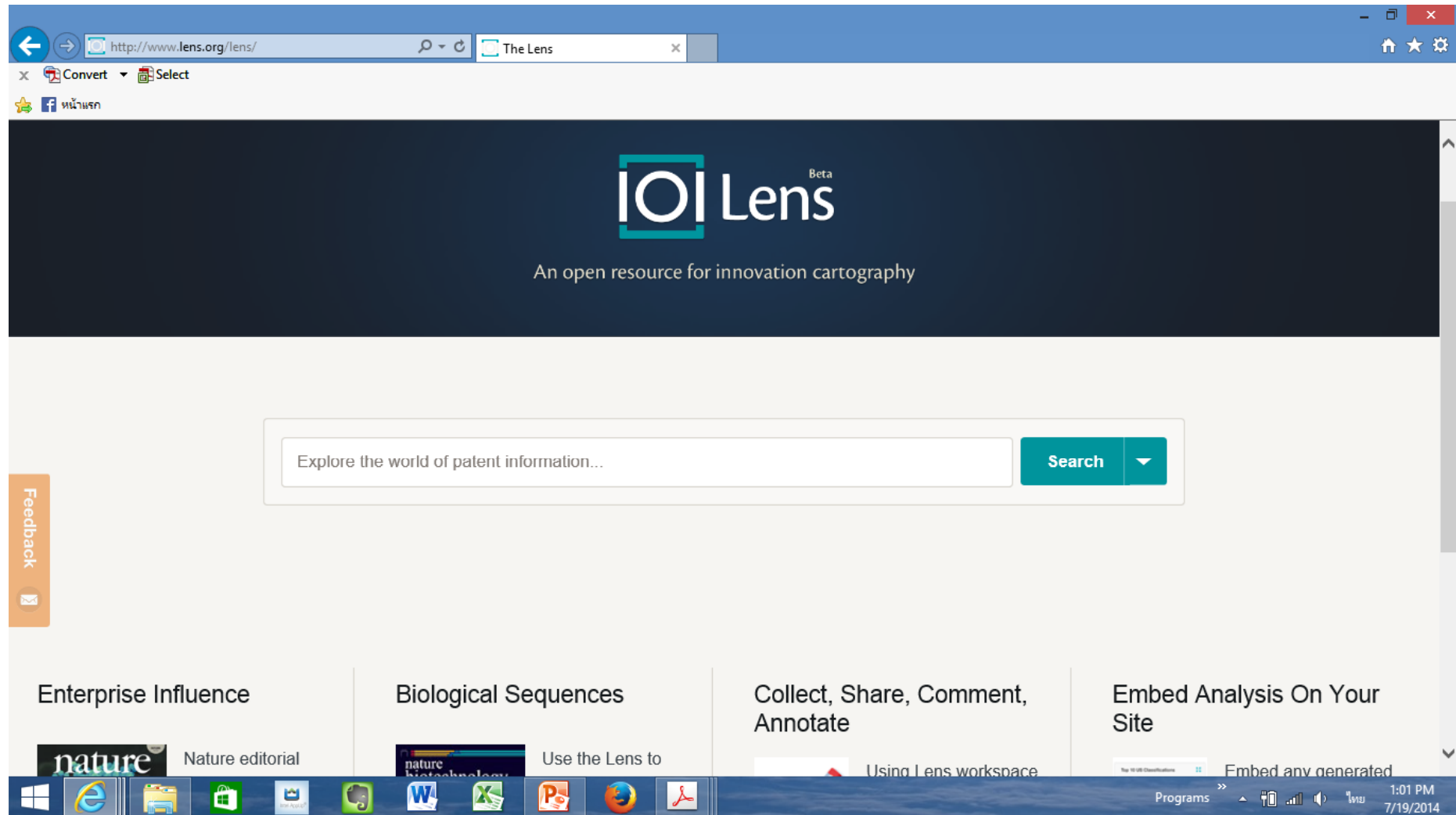
FIELD CODE	FIELD NAME	EXAMPLE
WO	Publication Number	WO/02/00157 OR WO2002/00158
AN	Application Number	AN/PCT/DE03/01815 OR AN/FR2004/002712
ET	English Title	ET/needle OR ET/syringe
FT	French Title	FT/aiguille OR FT/seringue
JT	Japanese Title	
IC	International Class	IC/H04Q-7/22 OR IC/H04N-*
ABE	English Abstract	ABE/"hypodermic needle" OR ABE/syringe
ABF	French Abstract	ABF/"aiguille hypodermique" or ABF/seringue
ABJ	Japanese Abstract	
DE	Description	DE/needle AND DE/phonograph
CL	Claims	CL/needle OR CL/syringe
FP	Front Page Bibliographic Data	FP/hovercraft
DP	Publication Date	DP/19.02.1998 OR DP/1998.02.19
AD	Application Date	AD/22.10.2004 OR AD/2004.10.23
NP	Priority Number	NP/0312464
PD	Priority Date	PD/24.10.2003 OR PD/2003.10.25
PCN	Priority Country	PCN/FR
DS	Designated States	DS/US AND DS/DE
IN	Inventor Name	IN/"Smith, John"
IAD	Inventor Address	IAD/Seattle
PA	Applicant Name	PA/"General Mot*" or PA/Ford
AAD	Applicant Address	AAD/Paris NEAR AAD/TX
ARE	Applicant Residence	ARE/US
ANA	Applicant Nationality	ANA/GB
RP	Legal Rep. Name	RP/"Jones, Will*"
RAD	Legal Rep. Address	RAD/Bellevue
RCN	Legal Rep. Country	RCN/DE
LGP	Language of Pub.	LGP/DE or LGP/JA
LGF	Language of Filing	LGF/EN OR LGF/FR
ICI	International Class (inventive)	ICI/F02M-45/08 OR ICI/A61N-*
ICN	International Class (non-inventive)	ICN/F02M-45/08 OR ICN/A61N-*
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Home > Structured Search

Structured Search Tips

Using the structured search tools on the right you can create specific search queries, filtering by dates, jurisdictions and document type. You can also alter default search perimeters such as stemming, family grouping, query language and the whether to only include documents with full text.

Structured search also allows you to limit your search terms to specific sections of documents. These sections include Inventors, Owners (US), Title, Abstract, Claims, Applicants, Non Patent Citations, Publication Number, and Filing Number. By searching for terms only within a given field, you can greatly reduce the number of extraneous results. For example, searching for an inventor's name only within the Inventor field will eliminate documents that happen to mention the inventor in passing.

To begin a search on a topic, it is therefore often best to begin by searching within the Title, Abstractor Claims to capture the broadest range of topical documents. Searching within Applicants may be useful for determining which entities hold which patent documents, but keep in mind that patents may change ownership and this change may not be recorded, and that patents held by a subsidiary will not appear in a search for patents held by the parent company.

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Document Type

☐ Patent Application

☐ Search report

☐ Abstract

☐ Granted Patent

☐ Amended Patent

☐ Plant patent

☐ Limited Patent

☐ Design right

☐ Statutory Invention Registration

17:05

27/4/2558

How can specific patent information be found?

- Search Strategies

- Patent document reference numbers and dates
- Applicants' or inventors' names
- Keywords
- Patent classification

United States Patent [19]		US005375612A	
Cottenceau et al.		[11] Patent Number:	5,375,612
		[45] Date of Patent:	Dec. 27, 1994
[54] POSSIBLY ABSORBABLE BLOOD FILTER	5,108,418 4/1992 Lefebvre 606/200		
[75] Inventors: Jean-Philippe Cottenceau, Antony; Gérard Chevillon, Montrouge; Maurice Roussigne; Guy Nadal, both of Poitiers, all of France	FOREIGN PATENT DOCUMENTS		
[73] Assignee: B. Braun Celsa, Chasseneuil, France	0420541 4/1991 European Pat. Off. .		
[21] Appl. No.: 40,259	0423916 4/1991 European Pat. Off. .		
[22] Filed: Mar. 30, 1993	2567405 1/1986 France .		
[30] Foreign Application Priority Data	2573646 5/1986 France 128/898		
Apr. 7, 1992 [FR] France 92 04226	2580504 10/1986 France .		
[51] Int. Cl. ⁵ A61M 29/00; A61B 19/00	3900517 7/1989 Germany 606/200		
[52] U.S. Cl. 128/899; 606/194; 606/200	Primary Examiner—Lee S. Cohen		
[58] Field of Search 128/897-899; 606/191, 194, 198, 200	Assistant Examiner—J. P. Lacyk		
[56] References Cited	Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy		
U.S. PATENT DOCUMENTS	[57] ABSTRACT		
4,727,873 3/1988 Mobin-Uddin 606/200	The invention relates to an implantable blood filter comprising a self-expanding external structure made from a zigzagged thread wound on itself in order to exhibit a closed configuration. A central strainer section is connected to the said thread at various points for the retention of possible blood clots. This strainer section may be made from a biologically absorbable material. Applications include the production of medical blood filters, which are self-centering and absorbable.		
4,817,600 4/1989 Herms et al. 606/198	19 Claims, 3 Drawing Sheets		
4,873,978 10/1989 Ginsburg 606/200			
4,990,156 2/1991 Lefebvre 606/200			
5,035,706 7/1991 Giantureo et al. 606/198			

Patent Document Numbers and Dates

- Application number
- Publication number
- Priority number-if filed initially in another country
- Date of filing
- Date of publication
- Priority dates

Applicants' or Inventors' Names

- Novartis, BMW, Sony, Mittal, etc.
- Dyson, Smith, etc.

**Caution: Same applicant may use different versions of their names e.g. International Business Machines, IBM, IBM Ltd., etc.*

(10),(11) Publication no.

Kind code

(51) IPC

(21) Application no.

(22) Filing Date

(30) Priority data

(71) Applicant

(72) Inventor

(74) Agent

(54) Title

(57) Abstract

(51) International Patent Classification:
G06F 3/048 (2006.01)

(21) International Application Number:
PCT/US2011/045928

(22) International Filing Date:
29 July 2011 (29.07.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/851,739 6 August 2010 (06.08.2010) US

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(75) Inventors/Applicants (for US only): LEBEAU, Michael
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(74) Agents: JAKOBSEN, Kraig A. et al.; Fish & Richard-
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CY, CZ, DE, DK,
DM, DO, EC, EE, EG, ES, FI, FR, GB, GR,
GM, GT, HN, HU, IL, IN, JP, KE, KG, KN,
KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU,
MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
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(84) Designated States (unless otherwise indicated, for every
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GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(i))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(ii))

Published:

- with international search report (Art. 21(3))

[Continued on next page]

(54) Title: INPUT TO LOCKED COMPUTING DEVICE

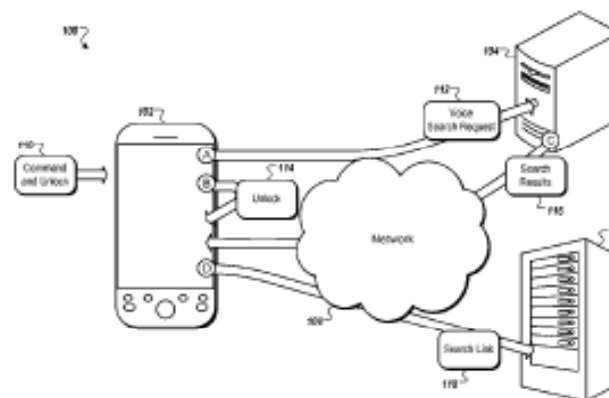


FIG. 1

(57) Abstract: The subject matter of this specification can be embodied in, among other things, a method that includes receiving at a computing device that is in a locked state, one or more user inputs to unlock the device and to execute at least one command

Keyword Search

- Describe essential technical features of the invention
- Can be searched in title, abstract, description or claims
- Important to remember to
 - Search for synonyms e.g. using specialized dictionary
 - Search for word variation e.g. plow (U.S.) vs plough (GB)
 - Languages: Only EN documents retrieved with EN keywords (only 65% of patents at WIPO is in English)

- ต้องเข้าใจเทคโนโลยีเรื่องนั้นเป็นอย่างดี
- เลือกใช้เลือกคำหลักที่เกี่ยวข้องในเทคโนโลยีที่สนใจ และปรับแต่ง เพิ่ม เปลี่ยน keyword เพื่อให้ได้คำที่ครอบคลุมเรื่องที่กำลังสนใจมากที่สุด
- นำคำที่ได้มาเชื่อมต่อกันโดยใช้ตัวช่วยสำหรับการค้นหา

Keyword Search

- Advantages
 - Easy to use
 - All invention details may be retrieved
- Disadvantages
 - Problems of synonyms
 - Various languages
 - Inconsistent terminology
- Solution:
 - Classification based search

Search Tools for Facilitating Keyword Search

- Truncation/Word Stemming
 - Elect*=electric, electrical, electricity, electronic, etc.
(but this might include irrelevant words such as election, elect, etc.)
 - Solution: electr*
- Phrase searching using “.....”
 - “electrical conductor” “solar cell”

Electrical toothbrush vs. “Electrical toothbrush”

Electrical toothbrush

4338 records (in any field)

5. 20140333260	CHARGING COIL SYSTEM FOR A DROP-IN TARGET DEVICE SUCH AS A TOOTHBRUSH	US	13.11.2014
H02J 7/02	14366282		
<p>A system and method for charging at least one target device (29) having a secondary coil (27) positionable in a charging receptacle (25) having a primary coil (23) connected to a source of electrical power, wherein the secondary coil of the target device is out of precise alignment with the primary coil when the target device is positioned in the receptacle. A plurality of steering coils (22-22) are arranged around the primary coil. A control circuit (24) changes the magnetic field phase pattern of the steering coils relative to the phase of magnetic field of the primary coil in a selected sequence until the maximum power transfer between the primary coil and the secondary coil is determined. Charging of the target device is continued with the maximum power transfer steering coil phase pattern.</p>			
6. 20140237744	TOOTHBRUSH HEAD	US	28.08.2014
A46B 9/04	14269613	TRISA HOLDING AG	BAERTSCHI Armin
<p>A toothbrush has a removable end cap at its free end area directed away from the bristles, which end cap closes off an inner space of a grip element. The end cap accommodates an electrical control element, in particular a potentiometer, which can be adjusted via an adjustment element arranged rotatably on the end cap. The toothbrush also comprises an electrical power consumption unit, in particular an electric motor, which is designed to set the bristles in vibration. The energy supply from an energy reservoir arranged in the interior to the electrical power consumption unit can be adjusted continuously by means of the control element, as a result of which the vibration intensity of the bristles can be steplessly adjusted.</p>			
7. 104011962	Charging coil system for a drop-in target device such as a toothbrush	CN	27.08.2014
H02J 7/02	201280063772.9	皇家飞利浦有限公司	T-J 塞尔斯
<p>A system and method for charging at least one target device (29) having a secondary coil (27) positionable in a charging receptacle (25) having a primary coil (23) connected to a source of electrical power, wherein the secondary coil of the target device is out of precise alignment with the primary coil when the target device is positioned in the receptacle. A plurality of steering coils (22-22) are arranged around the primary coil. A control circuit (24) changes the magnetic field phase pattern of the steering coils relative to the phase of magnetic field of the primary coil in a</p>			

“Electrical toothbrush”

5153 records (in any field)

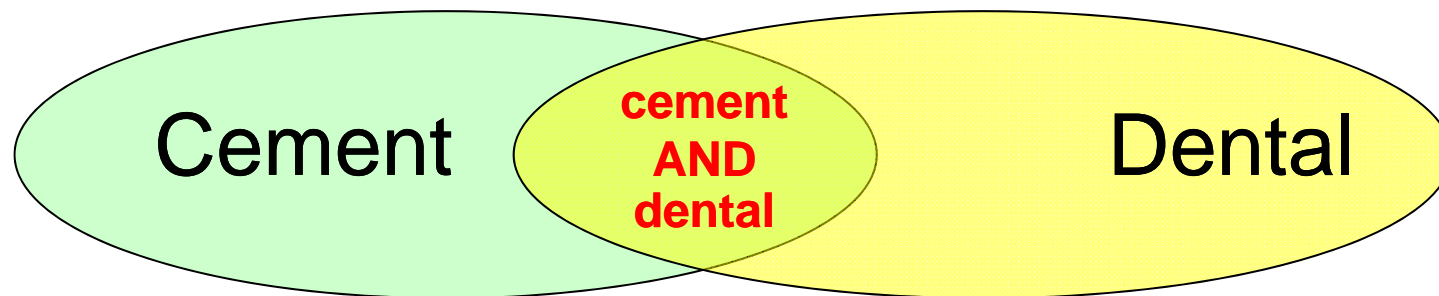
Int.Class	Appl.No	Title	Applicant	Ctr	PubDate
1. WO/2015/056528	ELECTRIC TOOTHBRUSH			WO	23.04.2015
A61C 17/22	PCT/JP2014/074978	SUNSTAR INC.			WADA Yukinori
<p>[Problem] To provide an electric toothbrush capable of enhancing cleaning properties between teeth while adequately maintaining cleaning properties on a tooth surface or tooth neck. [Solution] An electric toothbrush (1) having a brush part (2) in which bristle bundles (14) are implanted in implantation holes (13) of an implantation base (12), a handle part (3) as a grip for operating the brush part (12), and a vibration generating means (5) housed in the handle part (3), the vibration generating means (5) for rotating an eccentric weight (32) about an axis aligned with a length direction of the handle part (3) and causing the brush part (2) to vibrate, wherein level-difference bristle bundles (14A) implanted in the implantation holes (13) so that a level difference (H) is formed in a distal-end part thereof are provided as the bristle bundles (14).</p>					

Search Tools for Facilitating Keyword Search

- Parentheses (nesting) to clarify/order search queries e.g.
 - wheel AND (steel OR alloy)
 - not wheel AND (steel OR alloy)
- Boolean operators: keywords (and different search criteria) can be combined using AND, OR, NOT, XOR, NEAR

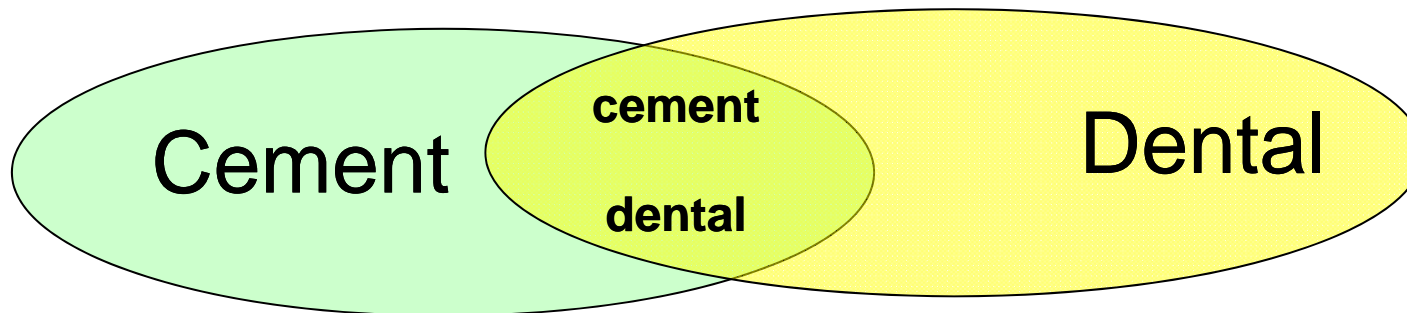
Boolean Operators

- Combine: cement *AND* dental
- Documents having *both* the words “cement” and “dental”



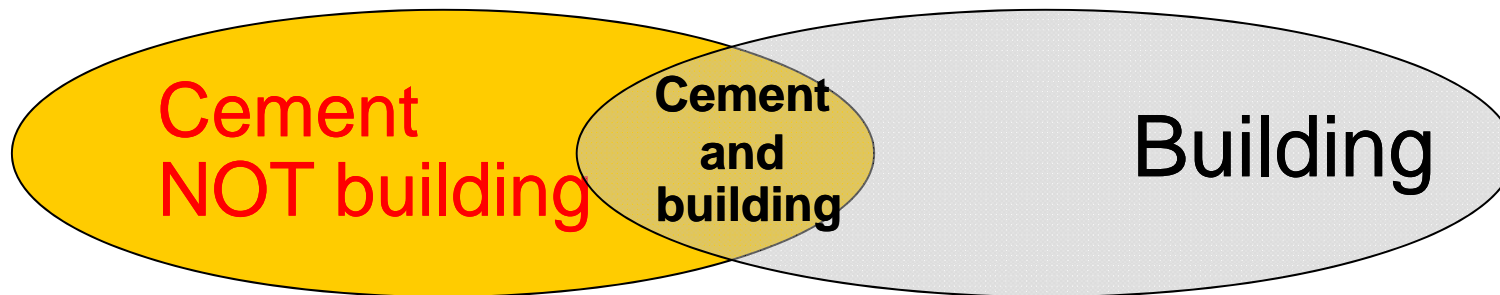
Boolean Operators

- Combine: cement **OR** tooth
- Documents having **either** the words “cement” **or** “dental”



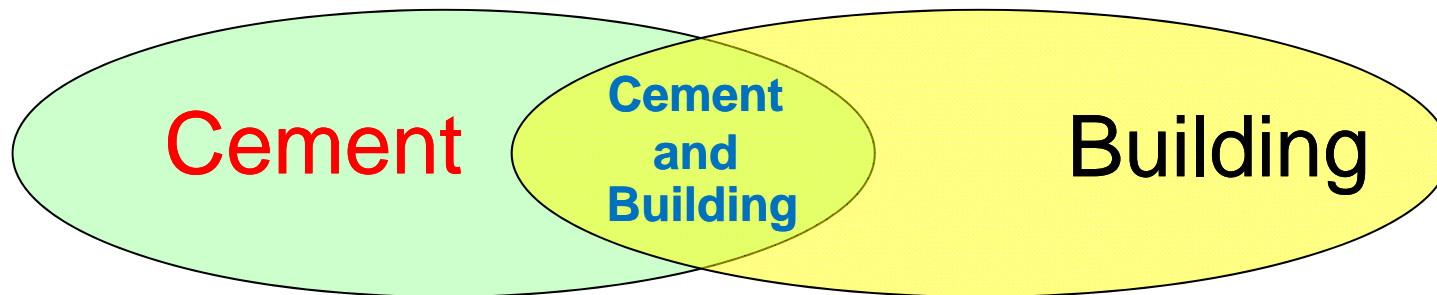
Boolean Operators

- Combine: cement **NOT** building
- Documents having the words “concrete”
but not “building”



Boolean Operators

- Combine: cement **XOR** building
- Documents having either the words “cement” or “building” but not both

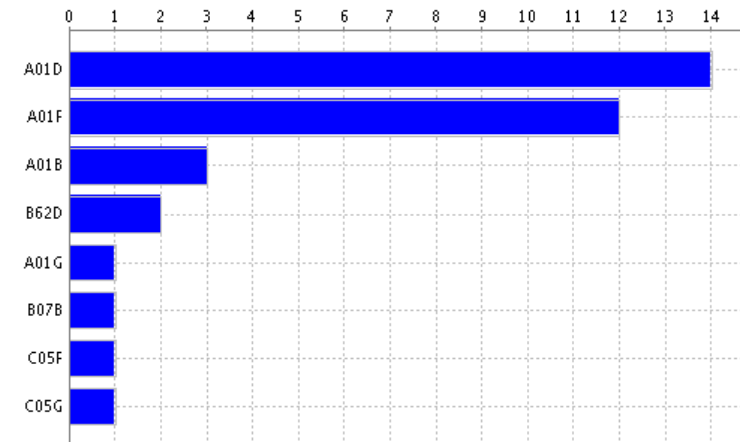
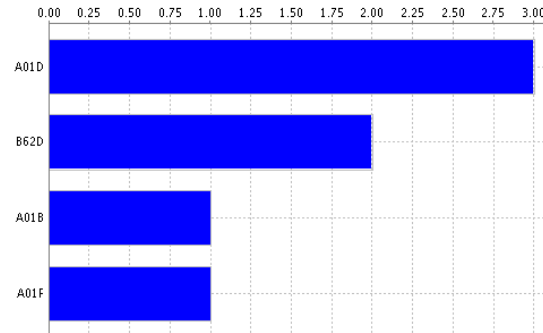
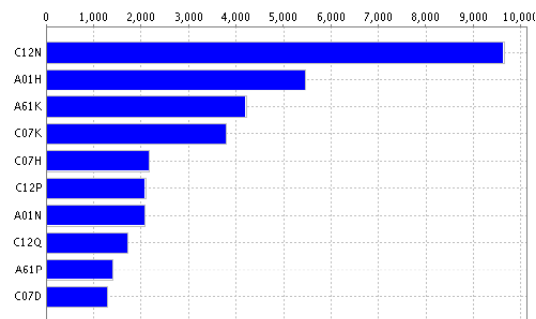


Near Operator

- Concrete *NEAR* building
 - Documents having both the words “concrete” and “building” within a certain number (maximum up to 5 words) of words of each other
 - Useful when searching variation or phrase containing two terms e.g. “concrete building”, “building made of concrete”, building having various parts of concrete” etc.







Rice harvesting machine vs. “rice harvesting machine” vs. rice NEAR harvesting NEAR machine

Rice harvesting machine	“Rice harvesting machine”	Rice harvesting NEAR machine
17756 records	5 records	28 records



Search term:

Root canal

4. WO/2015/047703 DRIP LINE AND EMITTER AND METHODS RELATING TO SAME				WO	02.04.2015
A01G 25/02		PCT/US2014/054533	RAIN BIRD CORPORATION	KIM, Jae Yung	
An irrigation emitter and drip line, and methods relating to same, are provided for reducing the flow and pressure of fluid via an emitter or plurality of emitters defined by two concentric tubes. In one form, the first tube defines an emitter inlet and connected pressure-reducing flow channel and the second tube is extruded over the first tube to enclose the emitter inlet and flow channel and defines an outlet connected to an end of the flow channel opposite the inlet to create an emitter for converting fluid flowing at a high flow rate in the lumen and at the first end of the inlet to a fluid with a low flow rate at the outlet of the emitter. In another form, a drip line is provided having a plurality of such emitters. The emitters capable of being provided with pressure compensation structures to compensate or account for fluctuations in supply line fluid pressure and root growth inhibiting members. Various methods related to the emitter and drip line are also disclosed					
5. 20150086631 Multi-Functional Micro and Nanoparticles for Use in Root Canal Therapies				US	26.03.2015
A61K 6/00		14385596	THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO	Anil Kishen	
Chitosan nanoparticles are provided for use in the in vivo treatment of connective tissues in root canal therapies. The nanoparticles are optionally linked with one or more photoactivatable compounds for providing antibacterial/antibiofilm properties, neutralizing bacterial byproducts and/or chemical/photodynamic crosslinking to achieve enhanced mechanical properties, chemical stability in connective tissues and/or to improve surface/interfacial integrity between filling material and connective tissue.					
6. WO/2015/041758 FAN ROOT ENDWALL CONTOURING				WO	26.03.2015
F01D 5/14		PCT/US2014/049368	UNITED TECHNOLOGIES CORPORATION	CARRICO, Jeff, M.	
A turbomachine includes an endwall with a plurality of circumferentially spaced apart, radially extending blades extending from the endwall. A first one of the blades defines a pressure surface of a flow channel, a second one of the blades defines a suction surface of the flow channel, and the endwall defines an inner surface of the flow channel. The endwall includes a radially raised portion that is raised proximate the suction surface, and a radially depressed portion downstream of the raised portion.					
7. 20150079538 DENTAL ROOT CANAL FILLING MATERIAL CARTRIDGE HAVING BUILT-IN HEATING MECHANISM FOR SOFTENING THE MATERIAL				US	19.03.2015
A61C 5/04		14445013	Nathan Y. LI	Nathan Y. LI	
A cartridge for storing root canal filling material cartridge and an applicator device for use with the cartridge to deliver root canal filling material. The cartridge includes its own heating mechanism, built-in the cartridge body. The heating mechanism includes an electrical heating element provided around the chamber of the cartridge body, which contains root canal filling material packed in the chamber. Electrodes are provided on the exterior of the cartridge body for the heating element. The cartridge is inserted into the barrel/chamber of an applicator device, with the cartridge electrodes coming into contact with electrodes provided on the applicator barrel/chamber walls, providing external power to the heating element on the cartridge.					
8. WO/2015/037694 HAIR ROOT COATING TOOL				WO	19.03.2015
A45D 24/22		PCT/JP2014/074170	KAO CORPORATION	KODAMA, Daisuke	
This hair root coating tool (10) is provided with a comb tooth section (13) in which a plurality of comb teeth (12) are vertically arranged on the surface of a comb tooth mount (14), and a container (11) in which hair dye is housed as a coating agent, said tool being configured so as to be able to coat the root portion of the hair with a hair dye supplied to the comb teeth (12) from the container (11). The comb teeth (12) include a comb-teeth main section (15) for combing hair, and a distal-end elastic deformation section (16) obtained using a soft resin, said elastic section being provided continuous with the distal end of the comb-teeth main section (15). The comb-teeth main section (15) is internally provided with a fluid guide channel (17) for the coating agent, a discharge opening (17a) of the fluid guide channel (17) being disposed near to the distal-end elastic deformation section (16).					
9. 2845346 SYSTEM AND METHOD FOR SECURE PROVISIONING OF VIRTUALIZED IMAGES IN A NETWORK ENVIRONMENT				EP	11.03.2015
H04L 12/24		13720725	CISCO TECH INC	CIVILINI MASSIMO	

Results 1-10 of 2,075 for Criteria:FP:(root NEAR canal) Office(s):all Language:EN Stemming: true

prev 1 2 3 4 5 6 7 8 9 10 next Page: 1 / 208 Go >

Refine Search FP:(root NEAR canal) Search RSS

Analysis

Sort by: Pub Date Desc View All List Length 10 Machine translation

Int.Class	Appl.No	Title	Applicant	Ctr	PubDate
					Inventor
1. 20150105916		METHOD AND DEVICE FOR PROGRAMMING A CORDLESS HANDPIECE FOR ROOT CANAL TREATMENT		US	16.04.2015
G05B 19/4093	14577577	W&H Dentalwerk Bürmoos GmbH		Gerald Helfenbein	
A method and device for programming a cordless handpiece used for root canal treatment and having a first memory and a tool holder for a treatment tool are described. The method includes providing a first data volume having a plurality of data sets in a second memory separate from the first memory, each of the data sets comprising at least one parameter assigned to the cordless handpiece and/or to the treatment tool, selecting at least some of the data sets from the first data volume in the second memory, transmitting the selected data sets from the second memory to the first memory of the handpiece, and selecting a data set from the updated first memory for operation of the handpiece.					
2. 20150089810		Dental and Medical Instruments Comprising Titanium		US	02.04.2015
B21F 45/00	14522013	Gold Standard Instruments, LLC		Neill Hamilton Luebke	
Endodontic instruments for use in performing root canal therapy on a tooth are disclosed. In one form, the instruments include an elongate shank having a cutting edge extending from a distal end of the shank along an axial length of the shank. The shank comprises a titanium alloy, and the shank is prepared by heat-treating the shank at a temperature above 25° C. in an atmosphere consisting essentially of a gas unreactive with the shank. In another form, the endodontic instruments have an elongate shank having a cutting edge extending from a distal end of the shank along an axial length of the shank. The shank consists essentially of a titanium alloy selected from alpha-titanium alloys, beta-titanium alloys, and alpha-beta-titanium alloys. The instruments solve the problems encountered when cleaning and enlarging a curved root canal.					
3. 20150086631		Multi-Functional Micro and Nanoparticles for Use in Root Canal Therapies		US	26.03.2015
A61K 6/00	14385596	THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO		Anil Kishen	
Chitosan nanoparticles are provided for use in the in vivo treatment of connective tissues in root canal therapies. The nanoparticles are optionally linked with one or more photoactivatable compounds for providing antibacterial/antibiofilm properties, neutralizing bacterial byproducts and/or chemical/photodynamic crosslinking to achieve enhanced mechanical properties, chemical stability in connective tissues and/or to improve surface/interfacial integrity between filling material and connective tissue.					
4. 20150079538		DENTAL ROOT CANAL FILLING MATERIAL CARTRIDGE HAVING BUILT-IN HEATING MECHANISM FOR SOFTENING THE MATERIAL		US	19.03.2015
A61C 5/04	14445013	Nathan Y. LI		Nathan Y. LI	

5. WO/2015/028743 ENDODONTIC INSTRUMENT WITH ROUGH SURFACES, AND METHOD FOR PRODUCING SUCH AN INSTRUMENT			WO	05.03.2015
A61C 5/02	PCT/FR2014/052074	NEOLIX	PERNOT, Jacques	
The invention relates to an endodontic instrument comprising a shaft to be secured in an instrument-carrier and an active part to be introduced into a root canal , the active part comprising a plurality of faces (21, 22, 23) and at least one edge (25, 26, 27) formed by the intersection of two faces; at least two of said adjacent faces having a surface with a roughness presenting an arithmetic mean deviation from the mean line Ra, selected such that 0.5µm				
6. 0002543031 METHOD OF TREATING RADICULAR CYSTS			RU	27.02.2015
A61K 31/5415	2013152300/14		Семенников Владимир Иванович (RU)	
FIELD: medicine. SUBSTANCE: carious cavity is prepared. Then it is treated instrumentally and antiseptically. A hole of an apical canal of a causative tooth is expanded. Methylene blue is introduced into the cyst through a root canal at a depth of 7-10 min. The cyst envelope is exposed to a laser light generated by a diode laser through the root canal for 30-60 s by means of a needle light guide. The exposure is continued from the vestibular or oral surface for 60.0-120.0 s by means of a plate light guide of intensity 0.5-1 W, wave length 625-630 nm in a pulse mode. Before the root canals of the causative tooth is hermetically sealed, Collap-An gel with metrogil 1.0-1.5 ml is introduced into the cyst. EFFECT: method enables provides increasing clinical effectiveness, avoiding the complications by removing the cyst envelope completely that enables restoring the bone defect structure completely. 2 ex				
7. 20150056571 Cross-Fluted Endodontic Instrument			US	26.02.2015
A61C 5/02	13971256	Heath Derek	Heath Derek	
An endodontic instrument adapted to be axially reciprocated within a root canal to remove material from walls of the root canal . The endodontic instrument includes an elongate shaft and a working portion. The elongate shaft includes a proximal end adjacent a handle and a distal end terminating at a tip spaced from the proximal end by the length of the instrument. The working portion includes a first helical fluted cutting surface for removing material from the walls of a root canal and a second helical fluted cutting surface for removing material from the walls of a root canal . The first helical fluted cutting surface and second helical fluted cutting surfaces are formed in opposing left-hand and right-hand directions such that material is removed from the walls of a root canal when the instrument is rotated in either a first or a second direction.				
8. 2838467 APPARATUS AND METHOD FOR ENDODONTIC TREATMENT			EP	25.02.2015
A61C 17/02	13778016	FLUIDFILE LTD	DARSHAN YEHUDA	
An apparatus for endodontic treatment, used for cleaning and/or abrading a root canal using at least one angled fluid jet. In some embodiments, the apparatus comprises a nozzle that is shaped to create one or more angled fluid jets, for example including an internal cone and an external cone. In some embodiments, the flow of fluid advances along a root canal wall for removal of soft tissue such as nerve tissue, pulp tissue, and/or debris.				
9. 20150044634 Root Canal Probe Tool and Method of Removing a Broken Instrument Fragment from a Root Canal			US	12.02.2015
A61C 5/02	14454093	Lasner Jeffrey I.	Lasner Jeffrey I.	
In endodontic therapy, a probe tool is disclosed which enables the removal of a broken file or instrument fragment wedged in a root canal of a tooth. A shank portion of the probe tool is made at least in part from flexible planar sheet material such as stainless spring steel. In a preferred method of use, a dental handpiece transfers oscillations or other cyclical rapid motions through the inventive probe tool to the root canal wall at the juncture with the embedded fragment. A portion of the shank end of the probe tool may be coated with abrasive material. The rapid motions or oscillations imparted to the flexible probe abrade the area where the fragment is wedged and yet minimize collateral damage to adjacent dentinal surfaces. Other types of dental handpieces can be used to transfer vibrational, reciprocating, hammering or circulatory motion to the probe tool when necessary to enhance the effectiveness of the abrading process. Another embodiment of the probe tool comprises a hook type barb to catch the loosened instrument fragment facilitating its removal from a root canal .				
10. 20150044631 APPARATUS AND METHOD FOR ENDODONTIC TREATMENT			US	12.02.2015
A61C 3/025	14522250	Fluidfile Ltd.	LIFSHITZ Amnon	

Classification Based Searches

- Advantages
 - More complete results than text searching
 - Independent of the language of the text
 - Independent of changes in terminology
 - Add more information value to patent documents
- Disadvantages
 - Complex structure of classification
 - Requires study of classification rules

การแบ่งหมวดหมู่ IPC

แบ่งตามหมวดใหญ่ Section

- A Human Necessities สิ่งจำเป็นสำหรับมนุษย์
- B Performing Operations, Transporting การปฏิบัติ การดำเนินการ การขนส่ง
- C Chemistry, Metallurgy เคมี วิธีการแยกโลหะออกจากแร่
- D Textiles, paper เสื้อผ้า กระดาษ
- E Fixed Constructions การซ่อมแซม การก่อสร้าง
- F Mechanical Engineering, Lighting, Heating, Weapons, Blasting
วิศวกรรมเครื่องกล เกี่ยวกับแสงสว่าง การทำความร้อน คลังแสง การระเบิด
- G Physics ฟิสิกส์
- H Electricity กระแสไฟฟ้า



ตัวอย่างการแบ่งหมวดหมู่ IPC

G02C 11/00

- Section

- class

- Sub-Class

- Main-Group

G = physics

G02 = optics

G02C = spectacles; sunglasses or goggles
insofar as they have the same features as
spectacles; contact lenses

G02C11/00 = non-optical adjuncts



US 20130235331A1

(19) **United States**

(12) **Patent Application Publication**
Heinrich et al.

(10) **Pub. No.: US 2013/0235331 A1**

(43) **Pub. Date: Sep. 12, 2013**

(54) **EYEGGLASS FRAME WITH INPUT AND
OUTPUT FUNCTIONALITY**

(52) **U.S. CL.**
USPC 351/158

(75) **Inventors:** **Mitchell Joseph Heinrich**, San
Francisco, CA (US); **Maj Isabelle
Olsson**, San Francisco, CA (US)

(73) **Assignee:** **GOOGLE INC.**, Mountain View, CA
(US)

(21) **Appl. No.: 13/413,936**

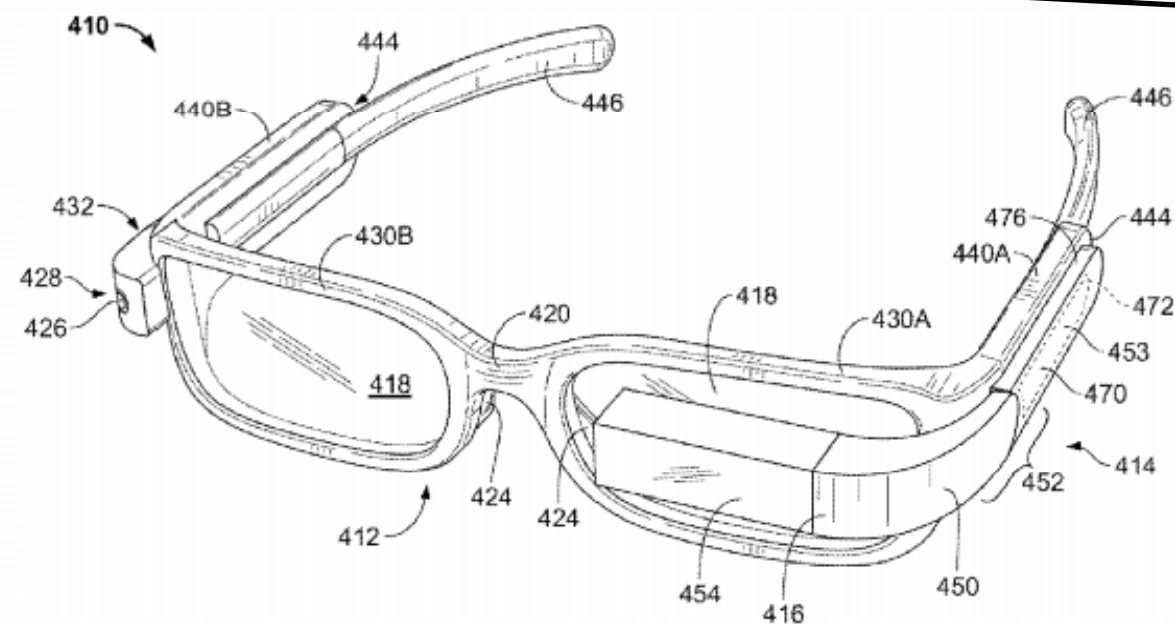
(22) **Filed: Mar. 7, 2012**

Publication Classification

(51) **Int. Cl.**
G02C 11/00 (2006.01)

(57) **ABSTRACT**

An electronic device includes a frame configured to be worn on the head of a user and having first and second rims with lenses and a bridge between the rims for resting on the nose of the user. First and second temple portions extend away from the rims to ends and are can be positioned over the temples of the user with the ends near the ears of the user. The device further includes a display element over one of the lenses and a housing having an arm portion affixed to the first temple portion. An elbow portion of the housing defines a display end that supports the display element at an angle to the arm portion. Image generating means within the housing can present an image on the display element. An input device on the housing can receive an input from the user.



G02C 11/00

International Patent Classification (IPC)

The International Patent Classification (IPC), established by the [Strasbourg Agreement 1971](#), provides for a hierarchical system of language independent symbols for the classification of patents and utility models according to the different areas of technology to which they pertain.

[Browse and search the IPC](#)



WORLD INTELLECTUAL PROPERTY ORGANIZATION

IPC Home Page - Help

Version

2015.01

Current symbol

A61C

Go to

Language

☒ English☐ French☐ English/French

View mode

☐ path☒ full☐ hierarchic☐ Show CPC/FI☒ Deleted entries☐ Subclass indexes☒ Guidance Headings☒ Notes

Search

Terms

Cross-references

Assistance

STATS

Text categorization
(IPCCAT)

Number of displayed entries

500

Last modified: 11.03.2015
IPCPUB v5.3

CPC version: 01.2015

FI version: 01.01.2015

Scheme RCL Compilation Catchwords Guide to the IPC

[D](#) [P](#) [F](#) **A61C** **DENTISTRY; APPARATUS OR METHODS FOR ORAL OR DENTAL HYGIENE** (non-driven toothbrushes [A46B](#); preparations for dentistry [A61K 6/00](#); preparations for cleaning the teeth or mo [A61Q 11/00](#))[Dental surgery](#)

- [A61C 1/00](#) Dental machines for boring or cutting [\[2006.01\]](#)
- [A61C 1/02](#) · characterised by the drive of the dental tools [\[2006.01\]](#)
- [A61C 1/04](#) · · with treadle or manual drive [\[2006.01\]](#)
- [A61C 1/05](#) · · with turbine drive [\[2006.01\]](#)
- [A61C 1/06](#) · · with electric drive [\[2006.01\]](#)
- [A61C 1/07](#) · · with vibratory drive, e.g. ultrasonic [\[2006.01\]](#)
- [A61C 1/08](#) · Machine parts specially adapted for dentistry [\[2006.01\]](#)
- [A61C 1/10](#) · · Straight hand-pieces [\[2006.01\]](#)
- [A61C 1/12](#) · · Angle hand-pieces [\[2006.01\]](#)
- [A61C 1/14](#) · · Tool-holders [\[2006.01\]](#)
- [A61C 1/16](#) · · Protecting caps for hand-pieces or angle-pieces [\[2006.01\]](#)
- [A61C 1/18](#) · · Flexible shafts; Clutches or the like [\[2006.01\]](#)

[D](#) **A61C 3/00** Dental tools or instruments (implanting tools [A61C 8/00](#); tools for fastening artificial teeth [A61C 13/12](#); visual inspection devices, e.g. dental mirrors, [A61B 1/24](#)) [\[2006.01\]](#)

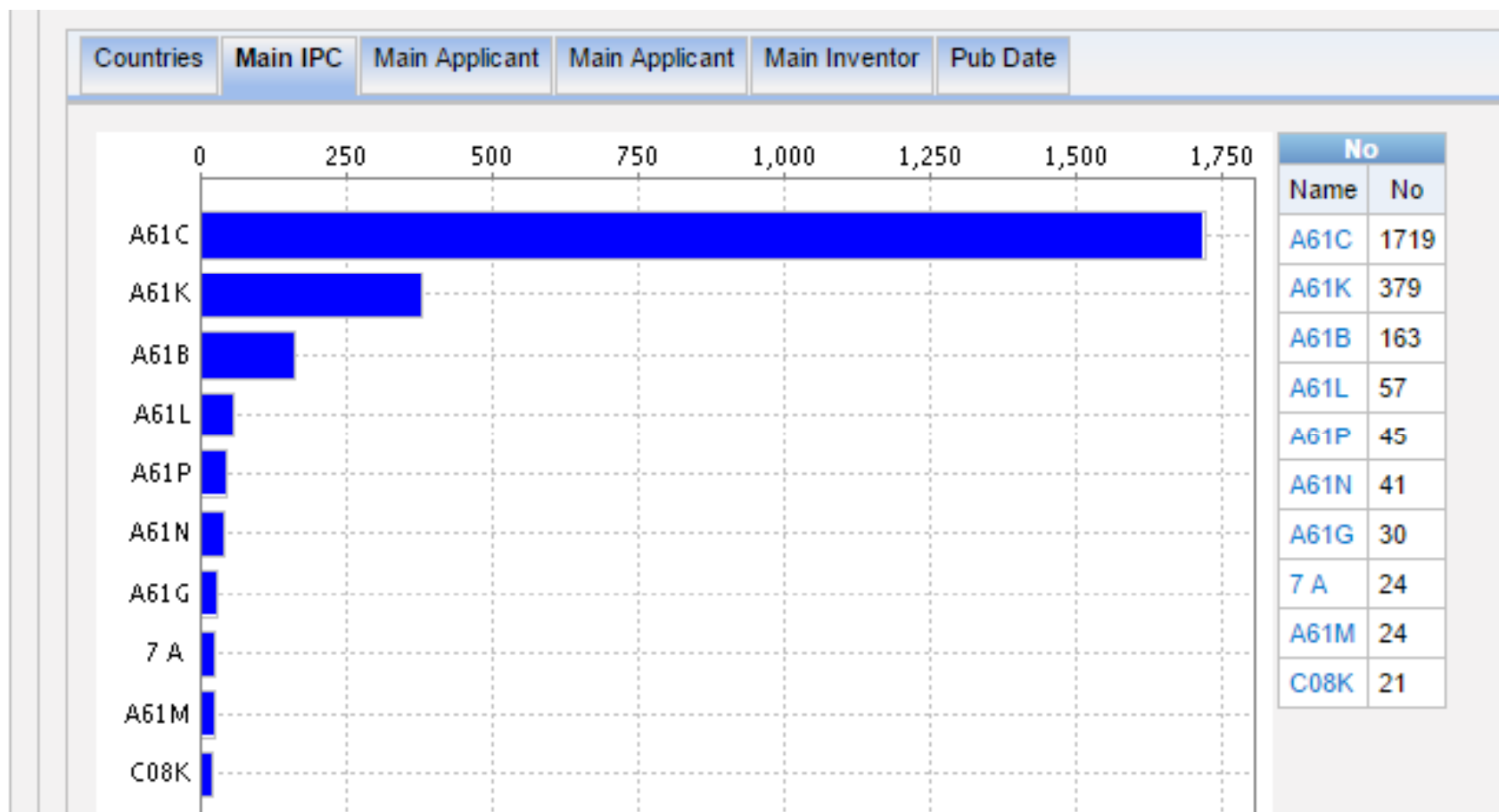
- [A61C 3/02](#) · Tooth drilling or cutting instruments; Instruments acting like a sandblast machine [\[2006.01\]](#)
- [A61C 3/025](#) · · Instruments acting like a sandblast machine, e.g. for cleaning, polishing or cutting teeth [\[2006.01\]](#)
- [A61C 3/03](#) · · Instruments operated by vibration [\[2006.01\]](#)
- [A61C 3/04](#) · Supports for holding tooth drills in order of use [\[2006.01\]](#)
- [A61C 3/06](#) · Tooth grinding or polishing discs; Holders therefor [\[2006.01\]](#)
- [A61C 3/08](#) · Tooth pluggers or hammers [\[2006.01\]](#)
- [A61C 3/10](#) · Tooth pincettes or the like [\[2006.01\]](#)
- [A61C 3/12](#) · Tooth saws [\[2006.01\]](#)
- [A61C 3/14](#) · Dentists' forceps or the like for extracting teeth [\[2006.01\]](#)
- [A61C 3/16](#) · Dentists' forceps for removing crowns [\[2006.01\]](#)

[D](#) **A61C 5/00** Filling or capping teeth [\[2006.01\]](#)

- [A61C 5/02](#) · Implements for surgical **treatment** of the roots or nerves of the teeth; Nerve needles; Methods or instruments for medication of the roots (substances for chemical **treatment** [A61K 6/00](#)) [\[2006.01\]](#)
- [A61C 5/04](#) · Implements for filling natural teeth; Methods or instruments for medication of tooth nerve channels (composition of the fillings [A61K 6/02](#)) [\[2006.01\]](#)
- [A61C 5/06](#) · Amalgam presses or mixers [\[2006.01\]](#)
- [A61C 5/08](#) · Tooth crowns; Making same; Securing crowns in the mouth (dental implants [A61C 8/00](#)) [\[2006.01\]](#)
- [A61C 5/09](#) · · Composite crowns [\[2006.01\]](#)
- [A61C 5/10](#) · · Methods or devices for making crowns [\[2006.01\]](#)
- [A61C 5/11](#) · · Securing crowns to natural teeth [\[2006.01\]](#)
- [A61C 5/12](#) · Tooth clamps; Dam holders [\[2006.01\]](#)
- [A61C 5/14](#) · Lip or mouth protectors [\[2006.01\]](#)

[D](#) **A61C 7/00** Orthodontics, i.e. obtaining or maintaining the desired position of teeth, e.g. by straightening, evening, regulating, separating, or by correcting malocclusions [\[2006.01\]](#)

- [A61C 7/02](#) · Tools for manipulating or working with an orthodontic appliance [\[2006.01\]](#)
- [A61C 7/04](#) · · plier type [\[2006.01\]](#)
- [A61C 7/06](#) · Extra-oral force transmitting means, i.e. means worn externally of the mouth and placing a member in the mouth under tension [\[2006.01\]](#)



A61C: DENTISTRY; [APPARATUS](#) OR METHODS FOR ORAL OR DENTAL HYGIENE (non-driven toothbrushes [A46B](#); [preparations](#) for dentistry [A61K 6/00](#); [preparations](#) for cleaning the teeth or mouth [A61K 8/00](#), [A61Q 11/00](#))

[A61K: PREPARATIONS](#) FOR MEDICAL, DENTAL, OR TOILET PURPOSES (devices or methods specially adapted for bringing pharmaceutical [products](#) into particular physical or administering forms [A61J 3/00](#); chemical [aspects](#) of, or [use](#) of [materials](#) for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles [A61L](#); soap compositions [C11D](#))

Patent Searching Strategy

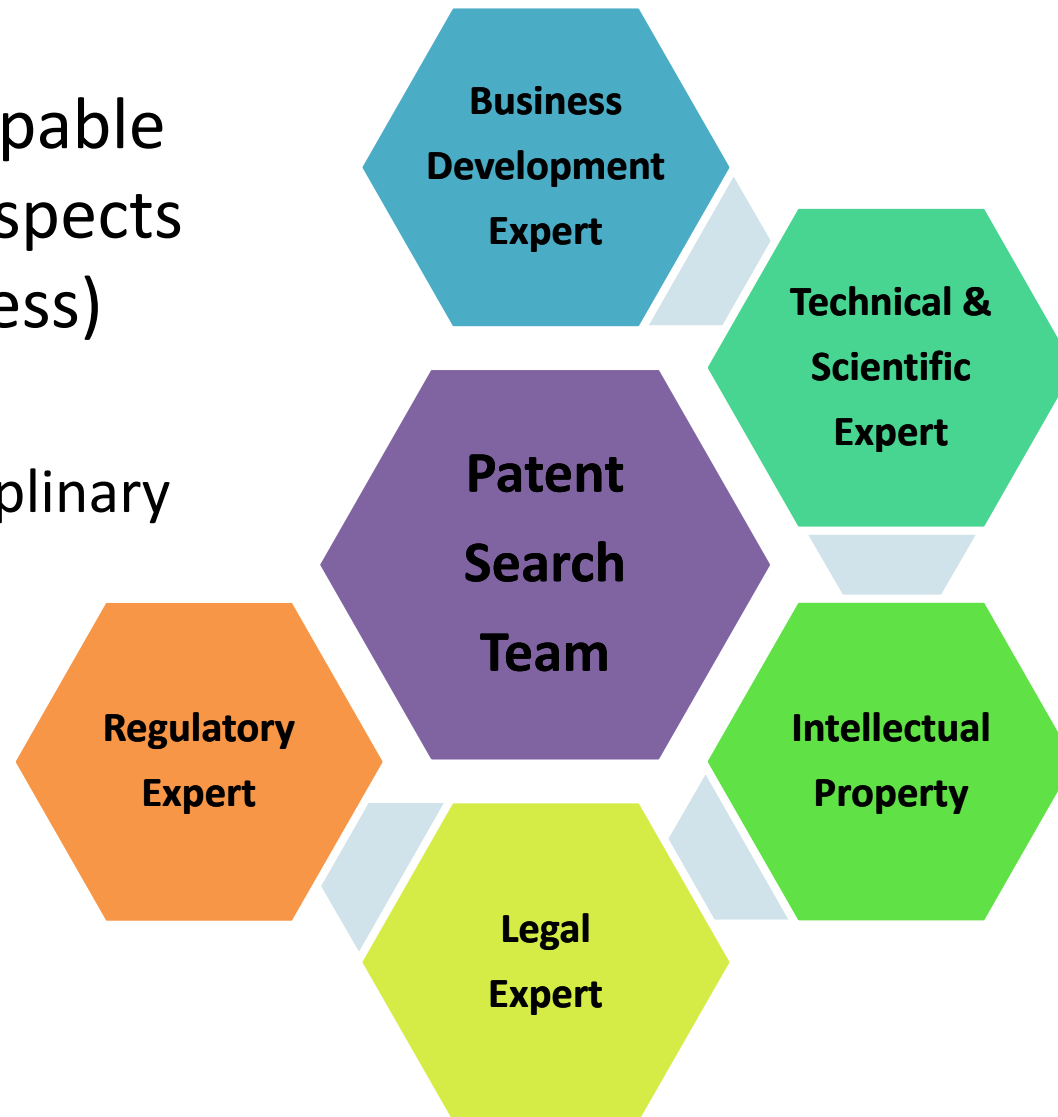
1. Define Subject Matter (What?)

- Define Subject Matter
 - Describe technology
 - Anticipated field of use
- Dissect Technology
 - Identify technology used to make product or process
 - Identify tangible property and property trail
 - MTA

Distinguish “core” and “substitutable” technologies

2. Formulate Patent Search Team (How?)

- Develop team capable of analyzing all aspects of product (process) development
 - Build multi-disciplinary team



3. Define Questions

- Interview and Laboratory History
 - Interview scientific, technical and tech transfer/IP staffs
 - Technical description of technology
 - Review published literature, presentation, research proposal
 - Deconstruction of technology components, methods, protocols and tangible assets (i.e. germplasm, microorganisms)
 - Acquisition trail (traceability via MTA: who got what from whom?)
 - Source of research funds, confidentiality agreement, employment agreement
- Develop series of questions relevant to project's immediate and future goals


Basic Search Strategy

- Find keywords expressing the essential concept of invention
- Find synonyms of these keywords from
 - Technical dictionaries
 - Documents already found in the technical field
 - Patent classification
- Carry search to see first broad results indicating also more synonyms and classifications

Basic Search Strategy

- Find useful patent classification symbols
- Use keywords search to find the most relevant classification
 - IPC TACSY (<http://www.wipo.int/tacsy/>)
 - esp@cenet (<http://v3.espacenet.com/eclarsch?locale=en> EP)
 - USPTO (<http://www.uspto.gov/go/classification/>)
- Carry out search to find relevant classification
- Combine the results of classification search with additional features of the searched technology using keywords

TACSY



IPCCAT - Categorization Assistant in the International Patent Classification version 2013.01

IPCCAT:

Help
About IPCCAT

GATEWAY TO:


IPC

Start

VIEW:

Submitted text

Suggested IPC Categories

Confidence	IPC	Description	Refine
★★★★★	A61C		▶▶
★★★★★	A61K		▶▶
★★★★★	A61G		▶▶

Change classification level:

Class

SubClass

MainGroup

Start From...

Start Over

Submitted text for classification:

dentel crown

4. Scope of FTO Investigation

- IP Search Strategy
 - Broad search
 - Limitations (geographical/temporal-scientific)
 - Record rationale IP search strategy, how data is gathered and analyzed, keep all data: even data deemed not relevant

Search term	Patentscope	Patent lens	DIP (Thailand)	Indonesia	China
Dental implant					
Dental implant and ceramics					
Dental implant NEAR ceramics					
“Ceramic Dental implant”					

Basic Search Strategy

- Iterate this procedure
- In general, always start broadly and narrow down to relevant documents as search progresses
- Read carefully a manageable number of documents

FTO analysis can never guarantee
that your company will not be sued.

- Quality of search
- Degree of relevance of each patent
or application

FTO Analysis Consideration

- Cost and Benefit
 - Identify, minimize and manage risk
 - Identify the area where patent coverage is thin or absent, therefore present opportunity
- Cost-Effective
 - If the company will go ahead regardless of the results, FTO analysis may not be cost effective.
 - Company should be comfortable with the risk of litigation

State of the Art Search

- To find the state of the art for “.....”
- Keywords:
- Synonyms:
- Truncation:
- Boolean operators (AND, OR, ANDNOT, NEAR)
- Parentheses

แนวทางการใช้ข้อมูลสิทธิบัตร

เพื่อการพัฒนาข้อเสนอโครงการวิจัยและพัฒนา

สิทธิบัตร & อนุสิทธิบัตร

- ชื่อการประดิษฐ์
- วันที่ยื่น/รับจดทะเบียน
- ประเทศที่ยื่นขอรับการคุ้มครอง
- ชื่อผู้ทรงสิทธิ
- ชื่อผู้ประดิษฐ์
- บทสรุปการประดิษฐ์
- รายละเอียดการประดิษฐ์
 - ภูมิหลังของการวิจัยและพัฒนา (prior art หรือ background of invention)
 - การเปิดเผยการประดิษฐ์โดยสมบูรณ์
- ข้อถ้อยสิทธิ

ข้อเสนอโครงการวิจัยและพัฒนา

- ความทันสมัยของหัวข้อวิจัยและพัฒนา
- ความอิสระในการดำเนินการวิจัยและพัฒนา รวมทั้งการใช้ประโยชน์จากผลงานวิจัยและพัฒนาดังกล่าว
- ความร่วมมือในการวิจัยและพัฒนา
- Potential licensee
- การทบทวนวรรณกรรม (Literature review)
- การออกแบบและวางแผนการทดลอง และ treatment ในการวิจัยและพัฒนา
- วัสดุและวิธีการทดลอง (materials & methods)

เครื่องมือในการสืบค้นฐานข้อมูลสิทธิบัตร



[\[USPTO\]](#)



[\[DIP\]](#)



[\[WIPO\]](#)



[\[Google Patent\]](#)



[\[EPO\]](#)



[\[Free Patent Online\]](#)



[\[JPO\]](#)



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- www.delphion.com
- www.patentcafe.com
- www.wipsglobal.com
- www.orbit.com
- www.thomsonreuters.com

Website: Free Patent Databases

- Patent lens <http://www.lens.org/lens/>
- WIPO (PATENTSCOPE®) <http://www.wipo.int/pctdb>
- EPO (esp@net) <http://www.espacenet.com/>
- JPO IPDL <http://www.ipdl.inpit.go.jp>
- USPTO <http://patft.uspto.gov>
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<http://www.scirus.com>
- Entrez (journals, books, (biomedical and related fields)
chemical structures, protein and gene sequences
<http://ncbi.nlm.nih.gov/Entrez/>



Photo was taken from facebook.com/hatyai

"Our soul is for the benefit of the mankind"



Akkharawit Kanjana-Opas, Ph.D.

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Prince of Songkla University Science Park

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OFFICE OF INDUSTRIAL LIAISON
สำนักงานความร่วมมืออุตสาหกรรม

