

US 2013/0218340 A1

Human-machine collaborative robotic systems

FIRST CURRENT ASSIGNEE
JOHNS HOPKINS UNIV

FIRST INVENTOR
HAGER GREGORY

ENFORCEABILITY GROUP
GRANTED APPS

PUBLICATION SNAPSHOT

PUBLICATION NO. US 2013/0218340 A1	PUBLICATION DATE 2013-08-22
APPLICATION NO. US 13/881,662	FILING DATE 2011-11-14
EARLIEST PRIORITY DATE 2010-11-11	EXPIRATION DATE N/A

ABOUT THIS REPORT

Patent Factor Indexes (PFIs) evaluate a patent based on advanced cognitive semantic analysis and large scale patent analytics modeling (including multivariate regression models coupled with econometric, citation, and bibliometric measures). PFIs guide technology experts in developing high confidence strategies regarding a patent's market positioning, making legal assessments, and/or supporting business-critical decisions related to a patent.

Emphasis should be placed on the individual indexes because each value contributes relative to the Recipient's unique objectives, perspective, core knowledge, assumptions, or understanding of the discrete research, market, or competitive indexes.

PATENT FACTOR INDEXES

Factors are normalized against a related probability curve. Values are from 0 to 1000 and represent the location on the curve.

Technology Vitality

CALCULATED VALUES

Invention Novelty (InvNov)	625
Competitive Position (ComPos)	875
Competitive Spread (ComSpr)	175
Competitive Size (ComSiz)	575

Research Vitality

CALCULATED VALUES

Invention Novelty (InvNov)	625
Invention Prevalence (InvPre)	200
Invention Commitment (InvCom)	675
Competitive Spread (ComSpr)	175

Market Vitality

CALCULATED VALUES

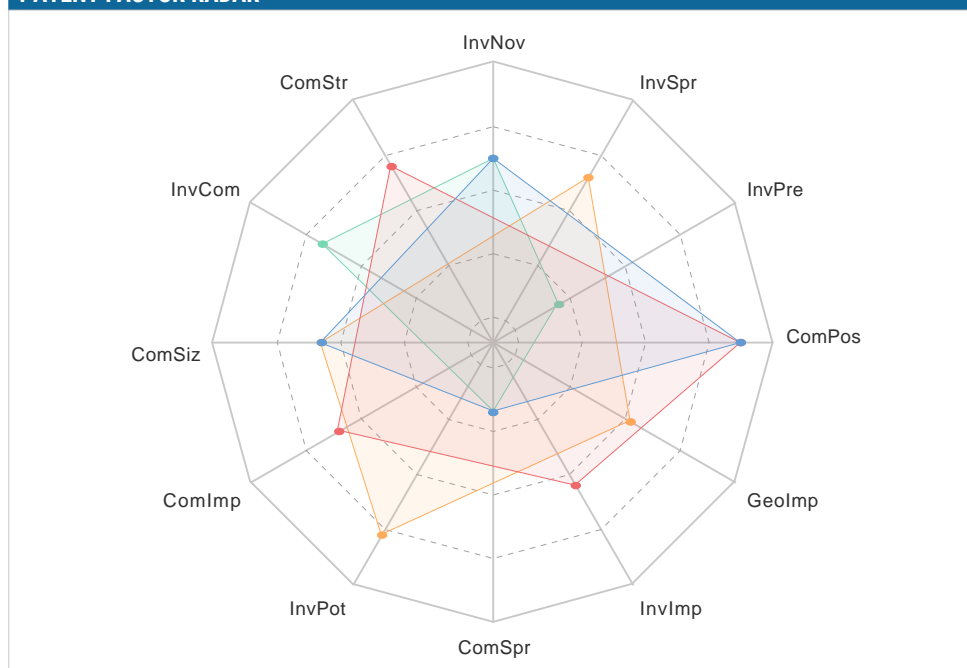
Competitive Size (ComSiz)	575
Geographic Impact (GeoImp)	525
Invention Potential (InvPot)	775
Invention Spread (InvSpr)	650

Comparative Vitality

CALCULATED VALUES

Competitive Strength (ComStr)	700
Competitive Position (ComPos)	875
Inventor Impact (InvImp)	550
Competitive Impact (ComImp)	600

PATENT FACTOR RADAR

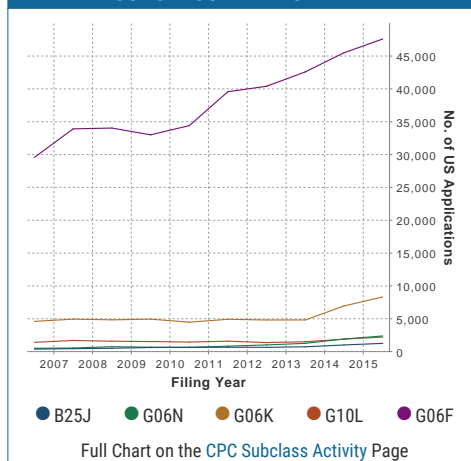


ENTITIES FROM THE PEER GROUP

#	ENTITY	COUNT
1.	AESYNT INC	1
2.	RETHINK ROBOTICS IN...	1
3.	GM GLOBAL TECH OPER...	3
4.	PARKER COLEMAN P	1
5.	WHITE MAGIC ROBOTIC...	1
6.	TOYOTA MOTOR CORP	2
7.	SCIENCE APPLICATION...	1
8.	CROSSWING INC	2
9.	MICROSOFT CORP	1
10.	TOYOTA MOTOR ENG &...	3

Full List on the [Enterprise Activity Page](#)

RELATED SUBCLASS TRENDS

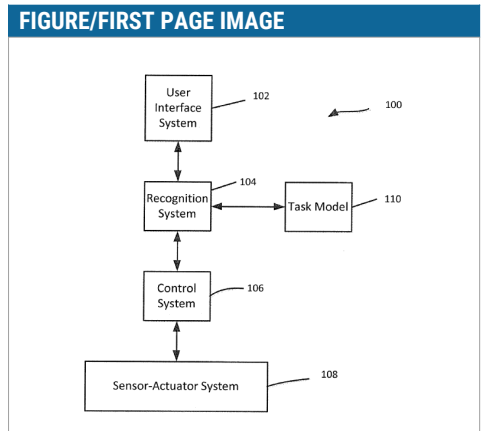


Patent Overview

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BIBLIOGRAPHY	
PUBLICATION TITLE: Human-machine collaborative robotic systems	
PUBLICATION NO: US 2013/0218340 A1	APPLICATION NO: US 13/881,662
INVENTORS: (2) HAGER GREGORY PADOY NICOLAS	
ASSIGNEES/APPLICANTS: (3) JOHNS HOPKINS UNIV HAGER GREGORY PADOY NICOLAS	
CURRENT ASSIGNEES: (1) JOHNS HOPKINS UNIV	
FILING ENTITIES: (1) JOHNS HOPKINS UNIV	
FILING DATE: 2011-11-14	EARLIEST PRIORITY DATE: 2010-11-11
ENFORCEABILITY GROUP: GRANTED APPS	EXPIRATION DATE: N/A
NATIONAL CLASSIFICATION: (1) 700/257	
IPC CLASSIFICATION: (1) B25J 9/16	
CPC CLASSIFICATION: (1) B25J 9/163	

Indicates there are additional classifications as only the first three are shown.
 See the Report Glossary page for further details.



ABSTRACT:

A semi-automatic, interactive robotic system for performing and/or simulating a multi-step task includes a user interface system, a recognition system adapted to communicate with the user interface system, a control system adapted to communicate with the recognition system, and a sensor-actuator system adapted to communicate with the control system. The recognition system is configured to recognize actions taken by a user while the user operates the user interface system and to selectively instruct the control system to cause the sensor-actuator system to perform, and/or simulate, one of an automatic step, a semi-automatic step or direct step of the multi-step task based on the recognized actions and a task model of the multi-step task.

SIMPLE PATENT FAMILY				
PUBLICATION NO.	TITLE	FILED	APPLICATION NO.	ENFORCE
US 20130218340	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	US13881662	Granted
CN 103249368 A	Human-machine collaborative robotic systems	2011-11-14	CN201180054479	Undetermined
EP 2637594 A2	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	EP11839194	Pending
EP 2637594 A4	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	EP11839194	Pending
JP 2013543764 A	Human-machine cooperation robot system	2011-11-14	JP2013538978	Undetermined
KR 20130137185 A	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	KR20137014499	Undetermined
WO 2012065175 A2	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	WOUS2011060638	Undetermined
WO 2012065175 A3	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	WOUS2011060638	Undetermined
WO 2012065175 A9	HUMAN-MACHINE COLLABORATIVE ROBOTIC SYSTEMS	2011-11-14	WOUS2011060638	Undetermined
CN 103249368 B	Man-machine cooperation robot system	2011-11-14	CN201180054479	Undetermined
JP 6106594 B2	Human-machine cooperative robot system	2011-11-14	JP2013538978	Undetermined
US 9283675	Human-machine collaborative robotic systems	2011-11-14	US13881662	Active

Technology Vitality

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PATENT FACTOR INDEXES

Technology Vitality

Invention Novelty (InvNov) 625

Invention Novelty is calculated using the semantic distance of the POI to the closest member found in the Peer Group. Higher values indicate greater uniqueness of the underlying ideas. This index informs whether the POI is an incremental step or a significant leap over the technology disclosed by its closest peer.

Competitive Position (ComPos) 875

Competitive Position is calculated using the current rank of the Filing Entities among the other Entities using the count for each Entity in the Peer Group. Higher values indicate a better position in the competitive food chain; eat or be eaten. This index informs the Filing Entities' investment commitment and its positioning relative to the other Entities in the same technology space.

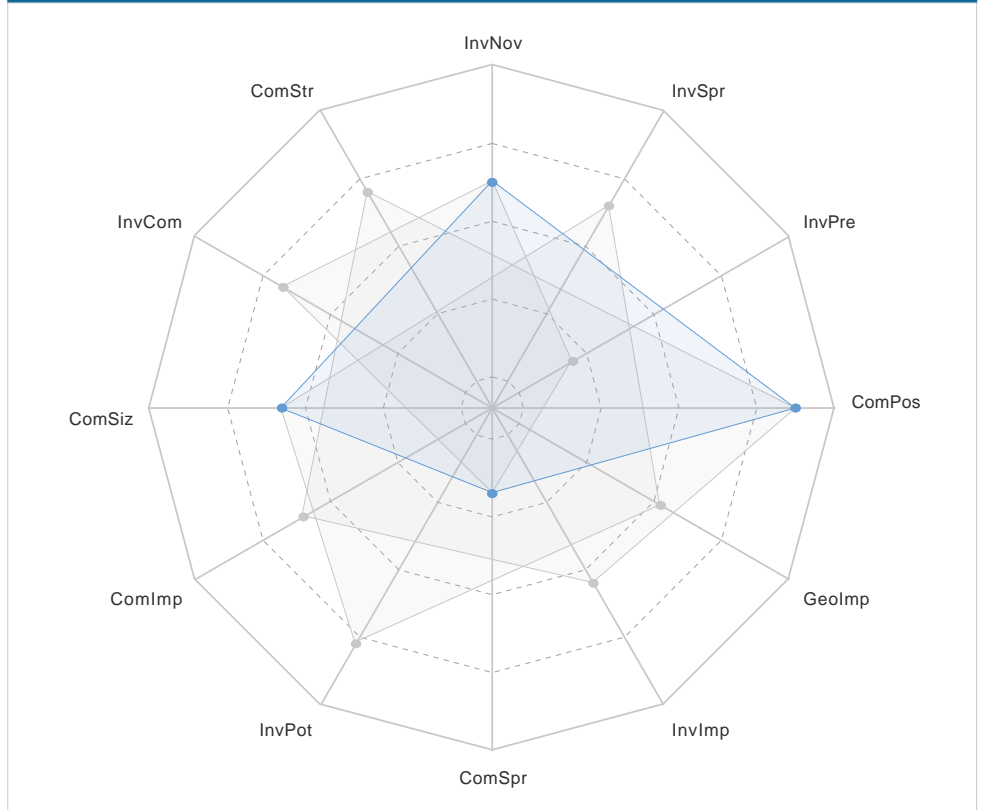
Competitive Spread (ComSpr) 175

Competitive Spread is calculated using the count of the Filing Entities' patents found in the Peer Group. Higher values indicate greater dominance in this technology area. This index informs the level of market protection obtained by the Filing Entities.

Competitive Size (ComSiz) 575

Competitive Size is calculated using the number of large versus small Entities found in the Peer Group excluding the POI. Higher values indicate a market more concentrated with larger institutional competitors. This index informs the favorability of the environment to generate the highest revenue per licensee.

PATENT FACTOR RADAR



About Technology Vitality

This group illustrates the technology opportunity afforded through the POI. This group is comprised of selected indexes from other groups; all of these indexes are calculated without the use of citations or classifications as underpinning elements. This group generally indicates the novelty of the POI, the market share of the POI's original owner, and the level of market concentration regarding the POI's technology.

Practically speaking, this group should be used to evaluate technologies within the first three years of publication. This group can be used as an early indicator of patent value. Low index scores correlate to low patent quality/value, whereas high index scores correlate to high patent quality/value.

Research Vitality

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PATENT FACTOR INDEXES

Research Vitality

Invention Novelty (InvNov) 625

Invention Novelty is calculated using the semantic distance of the POI to the closest member found in the Peer Group. Higher values indicate greater uniqueness of the underlying ideas. This index informs whether the POI is an incremental step or a significant leap over the technology disclosed by its closest peer.

Invention Prevalence (InvPre) 200

Invention Prevalence is calculated using the position of the POI in the Peer Group relative to overall Peer Group forward citation activity. Higher values indicate greater influence on other inventions. This index correlates positively with the POI's technological importance as measured by expert opinions, social value, and industry awards.

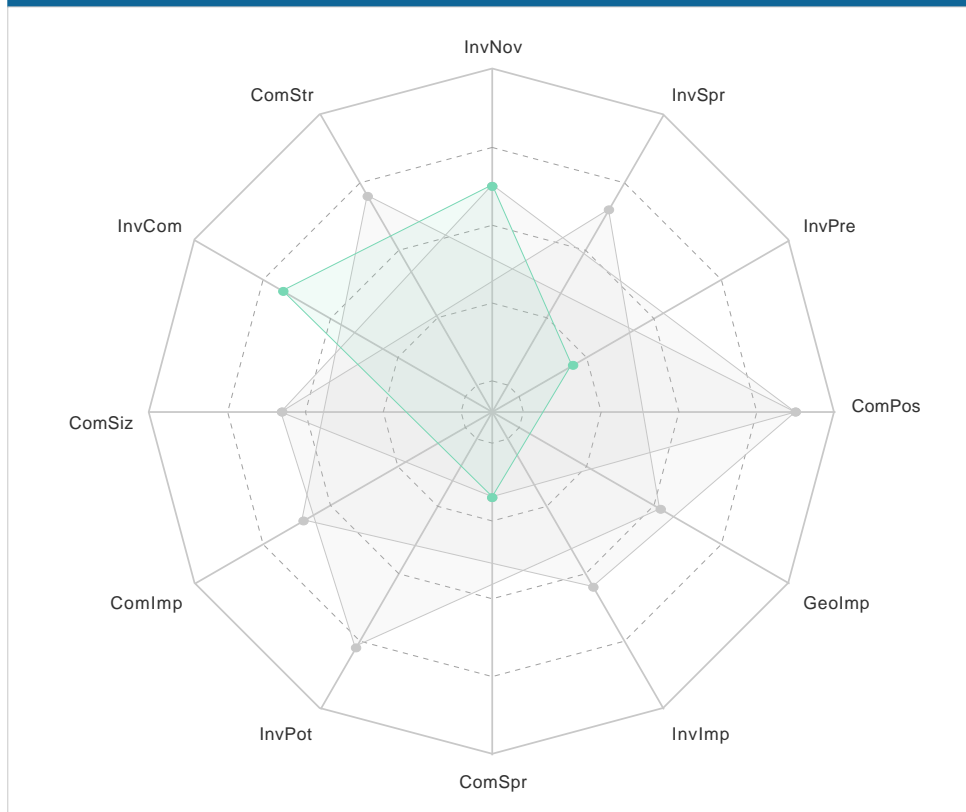
Invention Commitment (InvCom) 675

Invention Commitment is calculated using the number of patents in the POI's patent family. Higher values indicate a greater financial investment by the Filing Entities. This index informs the strategic commitment of the Filing Entities to this technology space.

Competitive Spread (ComSpr) 175

Competitive Spread is calculated using the count of the Filing Entities' patents found in the Peer Group. Higher values indicate greater dominance in this technology area. This index informs the level of market protection obtained by the Filing Entities.

PATENT FACTOR RADAR



About Research Vitality

This group illustrates the technology strength and financial commitment to the technology space indicated by the POI. Generally, these indexes measure inward-facing metrics; that is, metrics primarily influenced by the Filing Entities.

Patents with low scores in this group should be considered less significant and reviewed more thoroughly for elimination or invalidity. Conversely, patents with high scores are likely cornerstones of "patent bundles" which should be vigorously defended.

Market Vitality

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PATENT FACTOR INDEXES

Market Vitality

Competitive Size (ComSiz) 575

Competitive Size is calculated using the number of large versus small Entities found in the Peer Group excluding the POI. Higher values indicate a market more concentrated with larger institutional competitors. This index informs the favorability of the environment to generate the highest revenue per licensee.

Geographic Impact (GeoImp) 525

Geographic Impact is calculated by examining the number of unique authorities in the forward citations of the POI. Higher values indicate broader global opportunities for the invention. This index informs the worldwide interest in the technology space of the POI which may suggest a greater licensing potential.

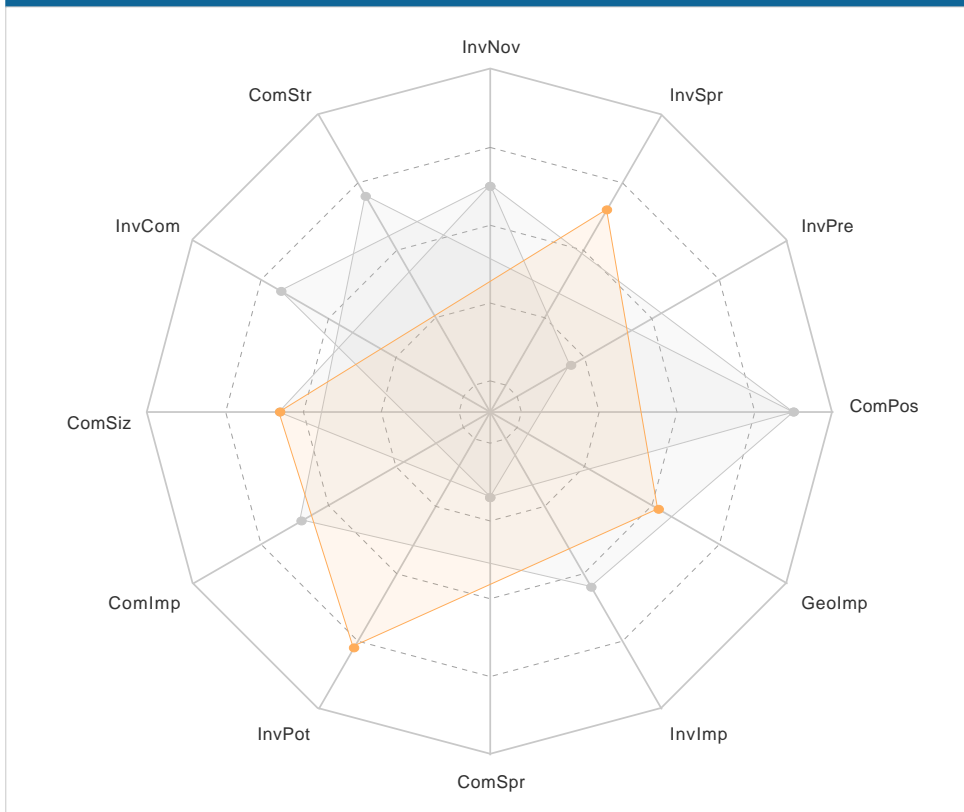
Invention Potential (InvPot) 775

Invention Potential is calculated by normalizing the forward citation activity over the lifetime of the POI using the primary CPC subclass. Higher values indicate greater potential to influence other inventions. This index uses the average forward citations within the primary CPC subclass over the lifetime of the patent to account for the time-dependent nature of forward citations. This index informs the depth of the POI's influence on other inventions.

Invention Spread (InvSpr) 650

Invention Spread is calculated using the unique CPC subclasses among the current forward citations of the POI. Higher values indicate broader applicability of the invention across technologies. The index informs the breadth of technology areas which the POI influences. Greater breadth of technology suggests the POI enjoys better opportunities because it addresses a broad range of technologies and industries.

PATENT FACTOR RADAR



About Market Vitality

This group illustrates the POI's ability to influence other technologies, create value in multiple industries, and have global appeal. Generally, these indexes measure world facing metrics; that is, metrics primarily influenced by global inventors, regardless of industry, who have encountered the patent.

Patents with high index scores are significant pieces of art and should command a premium in the market. Conversely, patents with low scores could be considered lower quality and should be reviewed for possible elimination. Caution should be applied when evaluating low scoring patents, however, because it often takes some time post-publication for an invention's impact to be discovered. Recently published patents may naturally have low scores.

The POI was published 4 years ago.

Comparative Vitality

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PATENT FACTOR INDEXES

Comparative Vitality

Competitive Strength (ComStr) 700

Competitive Strength is calculated using the semantic distances of the POI from the top three closest competitive peers. Higher values indicate greater differentiation from the competition. Peer members that teach the art better than the POI create a low score. This index informs invalidity/infringement risks or enforcement/licensing opportunities.

Competitive Position (ComPos) 875

Competitive Position is calculated using the current rank of the Filing Entities among the other Entities using the count for each Entity in the Peer Group. Higher values indicate a better position in the competitive food chain; eat or be eaten. This index informs the Filing Entities' investment commitment and its positioning relative to the other Entities in the same technology space.

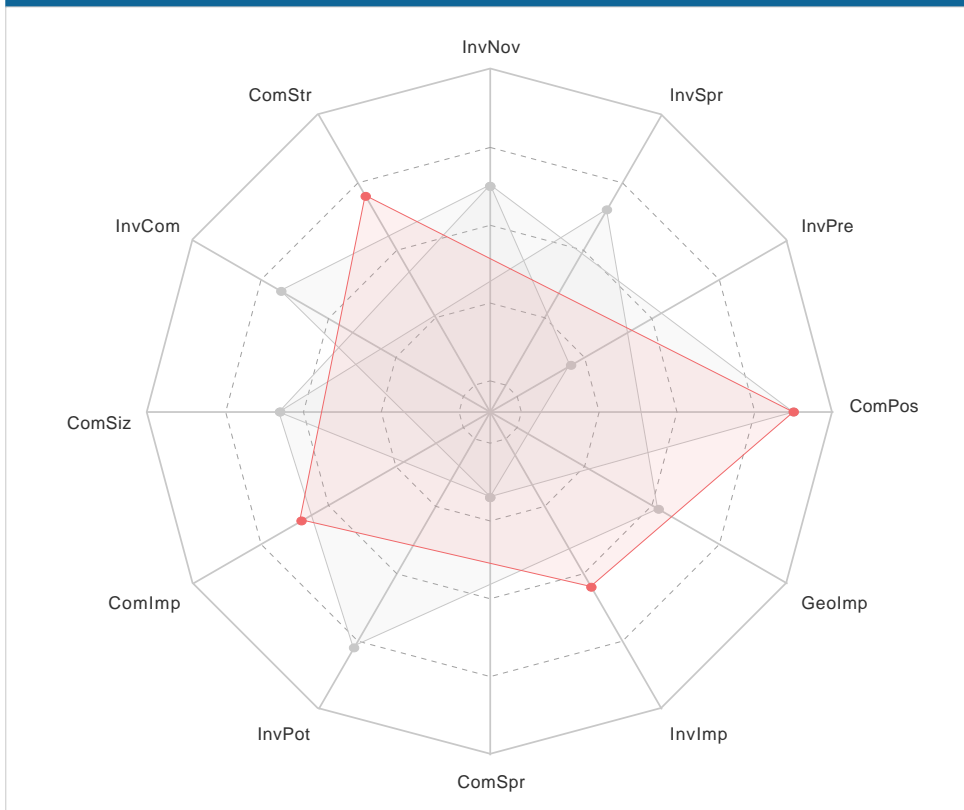
Inventor Impact (InvImp) 550

Inventor Impact is calculated using the current number of unique inventors in both the POI and the POI's forward citations after eliminating self-citations. Higher values indicate greater individual participation in this inventive space. This index informs the strength, substantiveness, and persistence of the POI's technology.

Competitive Impact (ComImp) 600

Competitive Impact is calculated using the current number of unique entities in the forward citations of the POI. Higher values indicate greater institutional participation in this inventive space. This index informs the potential for more activity in the market and possibly more licensing opportunities.

PATENT FACTOR RADAR



About Comparative Vitality

This group illustrates the standing and commitment to the technology space of the Filing Entities in comparison to the Peer Group. Generally, these indexes measure industry facing metrics; that is, metrics which assist in understanding the POI's positioning relative to potential partners and/or potential competitors.

Larger Entities can use this group to monitor competitive developments in the Peer Group such as gaining or losing market power. Individual inventors and small-to-medium size Entities can use this group to inform them about the number of potential licensing partners that are active in the technology space.

Emerging Technology

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PATENT FACTOR INDEXES

Emerging Technology

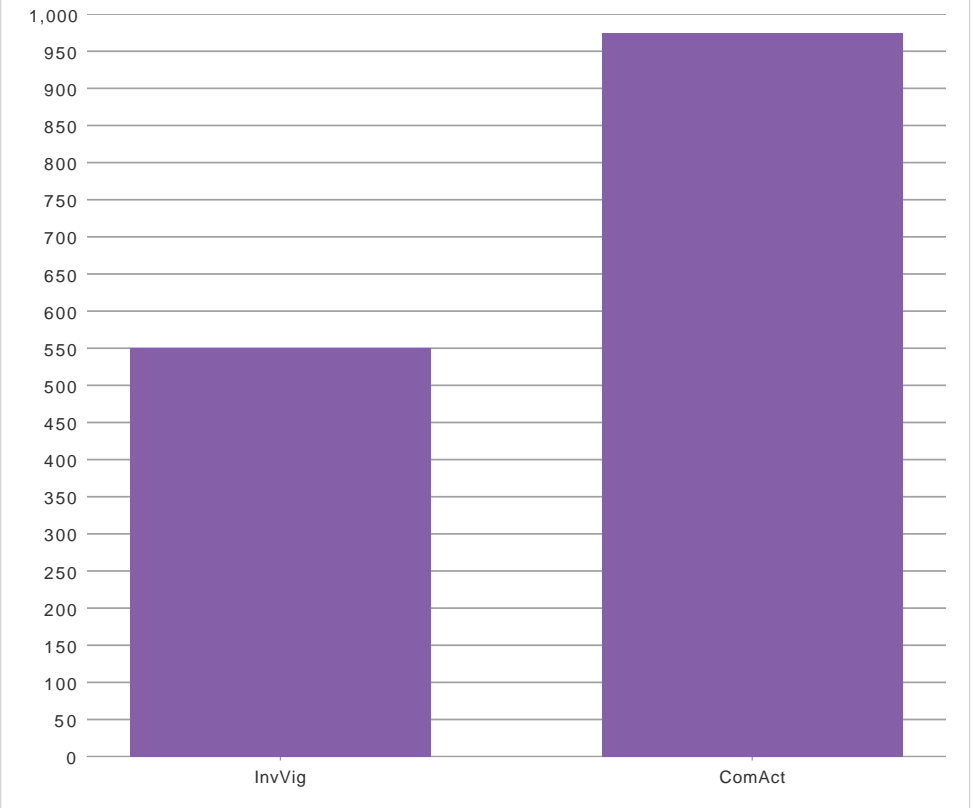
Invention Vigor (InvVig) 550

Invention Vigor is calculated by examining forward citation activity of the POI versus its current most cited peer within three years of publication. Higher values indicate greater interest in the invention; lower values suggest the POI has little visibility and therefore may have smaller commercial value. Higher values of this index also inform greater risks of litigation.

Competitive Activity (ComAct) 975

Competitive Activity is calculated using the count of the POI's backward citations compared to the backward cites within three years of application. Higher values indicate greater connections to other related technologies. This index also informs the level of development in the technology area and the number of connections to related technologies

PATENT FACTOR DIAGRAM



About Emerging Technology

In addition to the general purpose nature of these two Indexes, when applied in combination they can be used to spot a possibly influential technology. A high Invention Vigor score coupled with a low Competitive Activity score could signal a seminal patent. The rationale is that a patent that is actively cited within the first three years of issuance, where little relevant art was found prior to issuance, could represent a significant breakthrough.

Peer Group Activity

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About Peer Group Activity

Many PFIs use a set of patents closely related to the POI; this is called the Peer Group. A dynamic Peer Group of 100 publications is created by applying cognitive semantic retrieval technology to the POI's abstract and claims text. This results in a high quality set of related patents that are conceptually linked by their core concepts.

Other scoring systems often rely on static data such as classification codes to select related patents. Classifications, while useful, are limiting. By using our specialized approach, we locate patents in non-obvious areas that contain highly relevant art. This markedly improves outcomes and avoids the shortcoming of the static methodologies.

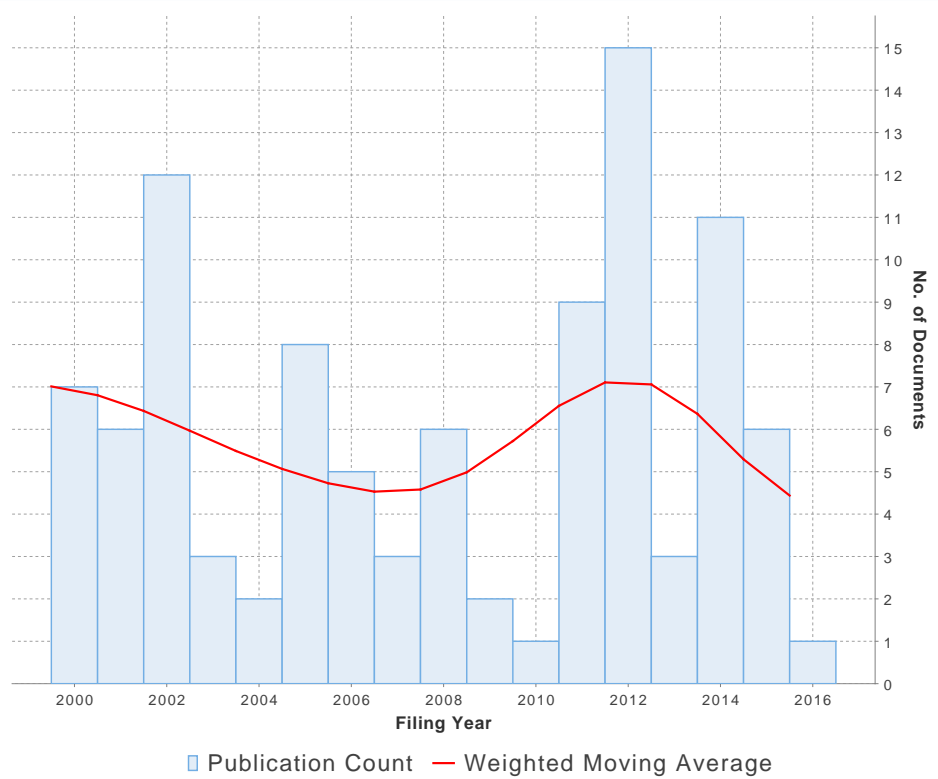
Regarding the Peer Group, on this page are a selection of the most relevant patents and a graph showing the rate of filing for the related period. Filing activity can be indicative of when the POI's technology emerged and the technology's rate of growth or decline.

POI Filing Date 2011-11-14

TOP PEER GROUP PATENTS

NO. / FILED	TITLE
US 8738383 2007-06-07	Remotely and interactively controlling semi-automatic devices
US 9092698 2012-09-17	Vision-guided robots and methods of training them
US 9387589 2014-02-25	Visual debugging of robotic tasks
US 9579799 2015-04-29	Robotic control system using virtual reality input
US 9671786 2012-02-17	Method and system for robot generation
US 9694496 2015-02-26	Providing personalized patient care based on electronic health record...
US 8346391 2006-12-28	Methods and systems for an autonomous robotic platform
US 8994776 2011-11-14	Customizable robotic system
US 8818556 2011-01-13	Multi-state model for robot and user interaction
US 9355368 2013-03-14	Computer-based method and system for providing active and automatic p...
US 9440356 2015-03-19	Customizable robotic system
US 6708068 2000-07-28	Machine comprised of main module and intercommunicating replaceable m...
US 7849024 2006-08-16	Imaging system for producing recipes using an integrated human-comput...
US 6714840 2002-02-12	User-machine interface system for enhanced interaction
US 8271132 2008-03-13	System and method for seamless task-directed autonomy for robots

FILING TREND



FILING TREND DATA TABLE

YEAR	COUNT	YEAR	COUNT
2000	7	2009	2
2001	6	2010	1
2002	12	2011	9
2003	3	2012	15
2004	2	2013	3
2005	8	2014	11
2006	5	2015	6
2007	3	2016	1
2008	6		

CPC Subclass Activity

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About CPC Subclass Activity

Cooperative Patent Classification (CPC) is a widely-used, international, hierarchical system for patent publications. The hierarchy is divided into sections, classes, subclasses, groups, and subgroups. The sections are (A) Human Necessities, (B) Operations and Transport, (C) Chemistry and Metallurgy, (D) Textiles, (E) Fixed Constructions, (F) Mechanical Engineering, (G) Physics, (H) Electricity, and (Y) Emerging Cross-Sectional Technologies. At the subclass level, it describes over 650 distinct categories across its sections.

Regarding the top CPC subclasses in the Peer Group, this page presents details of these subclasses with their associated trend graphs.

- Highlighted subclasses do not appear on the POI; this indicates non-obvious technology areas that apply to the POI's concepts.
- The patent application activity trend of each subclass teaches the overall interest in the related art. A rapid rise in activity may be an indicator of a vigorous period of technology diffusion or adoption. Because applications are published 18 months after filing, however, a rapid recent decline may not mean lessening activity.

POI Filing Date 2011-11-14

TOP SUBCLASSES IN PEER GROUP

CPC SUBCLASS	COUNT	CAGR
B25J	30	13.10%

DESCRIPTION

Manipulators; chambers provided with manipulation devices.

CPC SUBCLASS	COUNT	CAGR
G06N	17	20.51%

DESCRIPTION

Computer systems based on specific computational models.

CPC SUBCLASS	COUNT	CAGR
G06K	9	6.77%

DESCRIPTION

Recognition of data; presentation of data; record carriers; handling record carriers.

CPC SUBCLASS	COUNT	CAGR
G10L	9	6.12%

DESCRIPTION

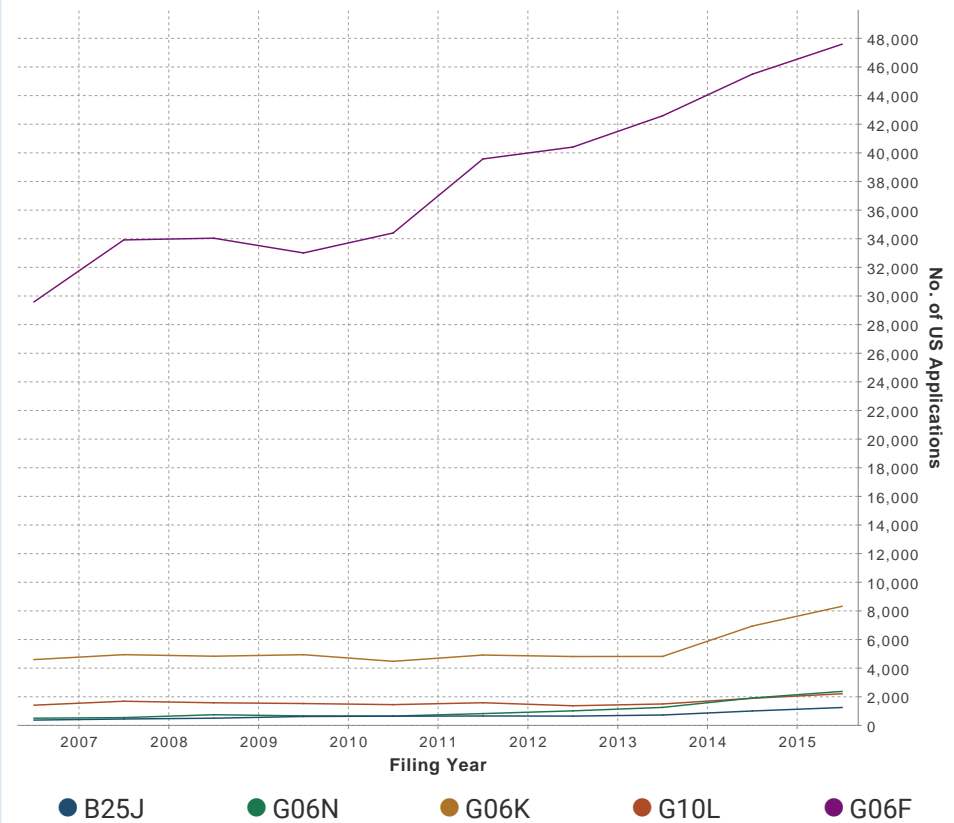
Speech analysis or synthesis; speech recognition; speech or voice processing; speech or audio coding or decoding.

CPC SUBCLASS	COUNT	CAGR
G06F	8	5.51%

DESCRIPTION

Electrical digital data processing.

RELATED SUBCLASS TRENDS



RELATED SUBCLASS TRENDS DATA TABLE

YEAR	B25J	G06N	G06K	G10L	G06F
2007	372	504	4598	1413	29592
2008	448	545	4942	1689	33916
2009	503	747	4833	1581	34038
2010	623	663	4939	1528	33007
2011	644	651	4477	1451	34403
2012	659	825	4916	1584	39572
2013	650	1017	4813	1373	40405
2014	726	1257	4819	1497	42588
2015	1008	1912	6942	1895	45496
2016	1250	2377	8320	2211	47589

Enterprise Activity

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About Enterprise Activity

The Entities from the Peer Group, as well as the Entities whose patents cite the POI, have a direct connection with the inventive ideas expressed in the POI. This indicates these Entities are involved with the POI's product or technology area. Entities with a greater number of patents have invested heavily in this area, indicating they consider this technology segment to be of high commercial interest. Entities that are prolific may prefer litigation to licensing, while the less invested Entities may welcome the opportunity to license.

The tables on this page teach the names of the enterprises that may be, now or in the future, fierce competitors, collaborators, licensees, or licensors. (Note that the Filing Entities will not appear in either table.)

ENTITIES FROM THE PEER GROUP

#	ENTITY	EARLIEST PRIORITY	TOTAL/ENFORCEABLE
1.	AESYNT INC	2007-06-07	1/1
2.	RETHINK ROBOTICS INC	2012-06-21	1/1
3.	GM GLOBAL TECH OPERATIONS INC	2009-09-22	3/3
4.	PARKER COLEMAN P	2014-04-30	1/1
5.	WHITE MAGIC ROBOTICS INC	2007-01-12	1/1
6.	TOYOTA MOTOR CORP	2008-02-18	2/2
7.	SCIENCE APPLICATIONS INTL CORP	2006-12-28	1/1
8.	CROSSWING INC	2010-11-12	2/2
9.	MICROSOFT CORP	2011-01-13	1/1
10.	TOYOTA MOTOR ENG & MFG NORTH AMERICA INC	2008-02-18	3/3
11.	YAMAHA HATSUDOKI KK	1999-07-28	2/0
12.	DRVISION TECH LLC	2006-08-16	1/1
13.	BATTELLE ENERGY ALLIANCE LLC	2008-03-13	1/1
14.	AXONN ROBOTICS LLC	2000-07-25	1/1
15.	TRUPHYSICS GMBH	2016-06-21	1/1
16.	QUALCOMM TECH INC	2012-06-01	1/1
17.	SONY CORP	1999-01-07	23/11
18.	KT CORP	2010-11-04	1/1
19.	BRAIN CORP	2014-03-13	2/2
20.	HONDA RSCH INST EUR GMBH	2006-06-22	1/1
21.	MILESTONE SCIENTIFIC INC	2007-07-27	1/1
22.	3DCONNEXION GMBH	2000-09-13	1/0
23.	SMS SIEMAG AG	2008-10-29	1/1

ENTITIES CITING THE PATENT OF INTEREST

#	ENTITY	EARLIEST PRIORITY	TOTAL/ENFORCEABLE
1.	SAMSUNG ELTNC CO LTD	2012-08-07	3/1
2.	AUTOFUSS	2011-01-25	2/2
3.	INDUSTRIAL TECH RSCH INST	2012-12-21	2/1
4.	HADDADIN BETEILIGUNGS UG HAFTUNGSBESCHRANKT	2015-12-30	1/1
5.	TOYOTA MOTOR ENG & MFG NORTH AMERICA INC	2015-03-05	1/1
6.	GOOGLE INC	2011-11-16	1/1
7.	SIEMENS AG	2014-03-07	1/0
8.	MICROSOFT CORP	2013-01-17	1/0
9.	DAIMLER AG	2011-12-09	1/0
10.	LINNELL JEFF	2011-01-25	1/0
11.	HAMMOND ASA	2011-01-25	1/0
12.	BYRNE KENDRA	2011-01-25	1/0

Report Glossary

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CAGR	An abbreviation for Compound Annual Growth Rate . The compound annual growth rate is a representational value that describes the rate at which a measurable trend would have grown if it had grown at a steady rate. It is presented in this report as another way to help teach an application rate trend.
CPC	An abbreviation for Cooperative Patent Classification . See the CPC Subclass Activity page. Read more on the web at http://www.cooperativepatentclassification.org .
CPC Subclass	A Cooperative Patent Classification (CPC) subclass is at the third tier of the CPC's five tier hierarchy. See the CPC Subclass Activity page.
Current Assignees	Businesses obtain an ownership interest in a patent by receiving an assignment from its inventors. These businesses become the patent's current assignees. A patent may change hands after publication; this re-assignment may be formalized at the patent authority. Current Assignees tries to reflect the most current assignees (that is, the owners) of the patent.
Earliest Priority Date	Patent law can be complex. The patent publication's filing date is generally the date when the application is first filed at a patent office. The priority date, which can be thought of as the "effective filing date" is the date that establishes the novelty and/or obviousness of a particular invention. For example, this occurs when an application contains an invention which was expressed in an earlier, related patent application.
Enforceability	<p>This report uses Enforceability Groups. These groups are a summary of legal events including maintenance payments and expiration date of issued patents that help indicate whether a patent is enforceable. <i>Active</i> patents have neither reached their expiration date nor had a legal event which could cause the patent to be unenforceable. <i>Inactive</i> patents have reached their expiration date and/or had a legal event which could cause the patent to be unenforceable. This is not a definitive grouping and reflects the current data from IFI. Additionally, patents may move back and forth between the two groups. For example, a patent with missed maintenance fees is unenforceable but can become enforceable again when fees are paid.</p> <p>Patent applications are grouped as <i>granted</i>, <i>inactive</i> or <i>undetermined</i>. Inactive applications have been withdrawn, abandoned, or rejected. Pending applications are grouped as <i>undetermined</i>.</p>
Entity (or Entities)	Patent applications and grants are published with names of people and/or enterprises associated with them. These names are generally contained in the fields <i>Inventors</i> , <i>Applicants</i> , and <i>Assignees</i> . It is desirable to try to determine the names of only the enterprises; these usually are the names of the companies or institutions associated with the patent. For the purpose of this report, the Entities listed on a patent publication are the combination of the names in the <i>Applicants</i> and <i>Assignees</i> fields after removing the names in the <i>Inventors</i> field.
Filing Entity (or Filing Entities)	Technically, every Entity listed on a patent publication has "filed" for a patent. For the purpose of this report, when Filing Entities is used it means specifically the Entities found in the Publication of Interest (POI).
IPC	An abbreviation for International Patent Classification . The IPC system pre-dates and is being replaced by the Cooperative Patent Classification (CPC) system.
No.	In tables and graphs, used as an abbreviation for number .
Peer Group	The Peer Group is a set of patents that are semantically and conceptually related to the inventive ideas embodied in the Publication of Interest (POI). See the Peer Group Activity page.
PFI	An abbreviation for Patent Factor Index . See Page One of this report.
POI	An abbreviation for Publication Of Interest . The POI is the patent application or grant publication which is being analyzed by this report.



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