

Google Technology Analysis

FOR PATENTS WITH APPLICATION YEAR 2010

RUCHICA KUMAR

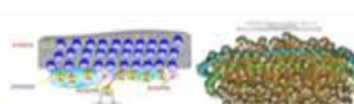
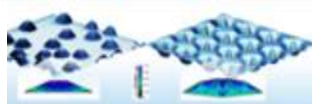


Why you need Patent Analysis done for your portfolio..????

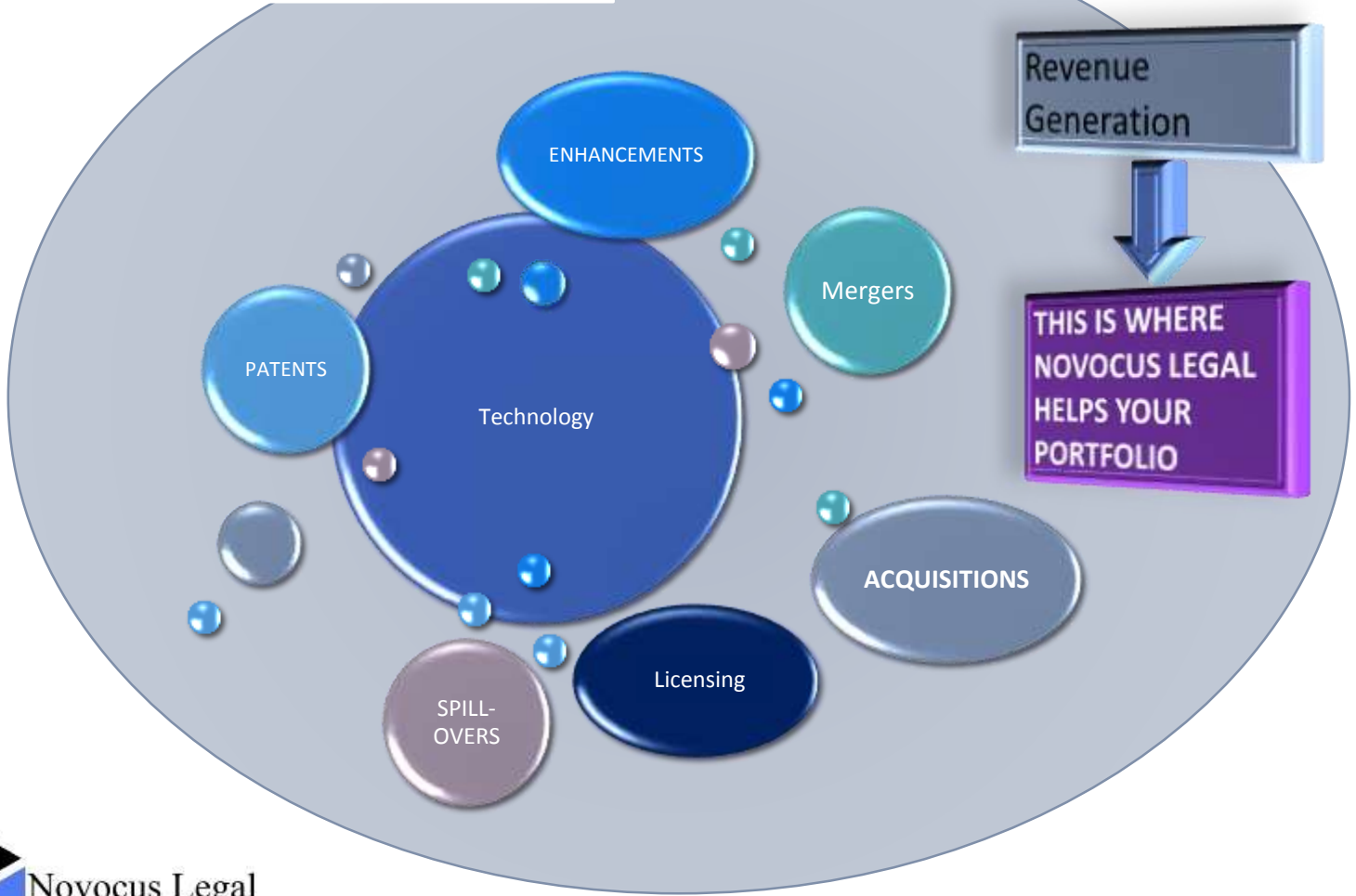
- Data analytics is heart of every model aimed at spurring innovation.
- Unique combinations as foundation to spur innovation.
- Collaborations have led to recent advances including neuro-stimulators, stent technologies, biomarkers, robotic assistance and implantable electronic devices.
- Today, the ratio of tangible to intangible assets has inverted - nearly 80% of corporate value resided in intangible assets as reported by analysis of S&P 500 market value.
- While strategic buyers have been acquiring assets to add new growth engines to their portfolios, they have been divesting noncore assets, creating attractive carve-out opportunities for private equity.



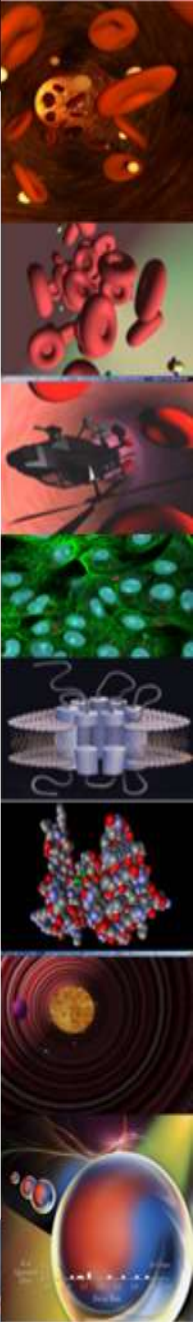
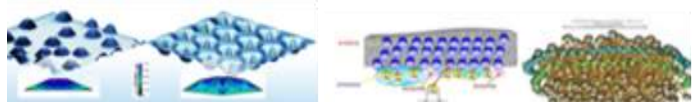
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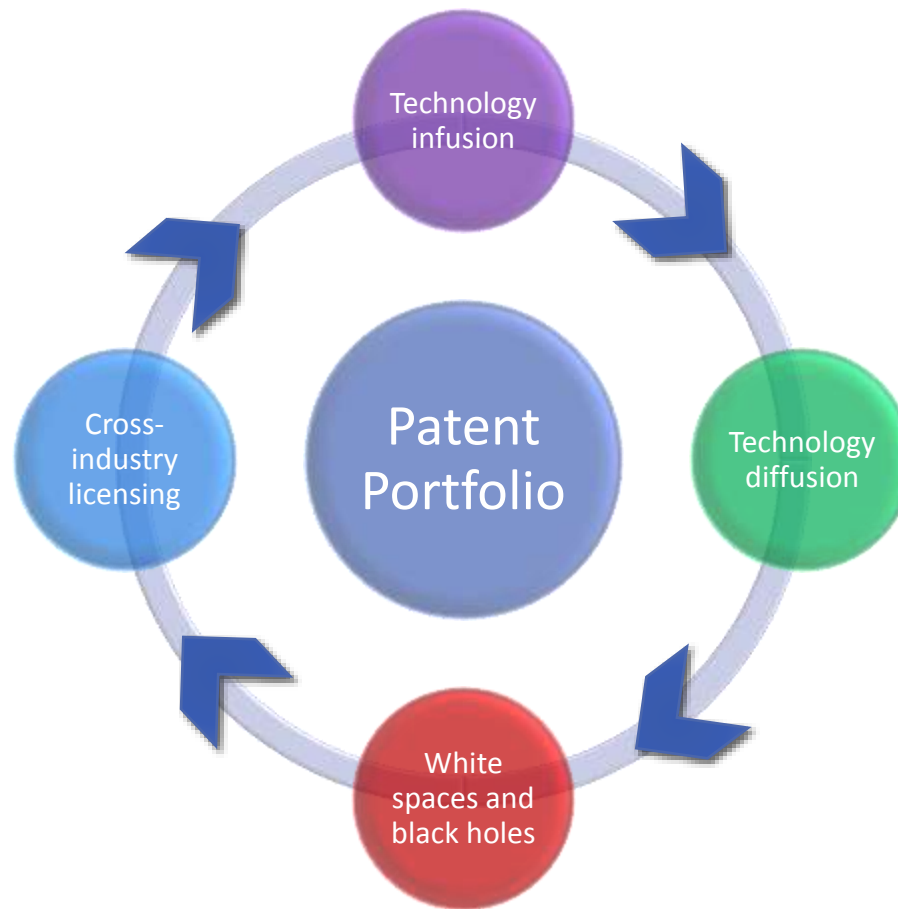
Story of every Patent Portfolio



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Knowledge Externality analysis (Technology Diffusion) – Example using Google Patents for year 2010



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AN EXAMPLE OF TECHNOLOGY DIFFUSION AND EVOLUTION USING PATENTS FOR YEAR 2010 WITH “GOOGLE” AS ASSIGNEE

We present an approach to efficiently generate effective intelligence on emerging technology landscapes. This approach draws on monitoring technical data and bibliometrics to mine the wealth of information available in major public and commercial electronic databases. The approach uses new software to expedite secondary analyses of database searches on topics of interest. We illustrate the range of information profiles possible by examining research and development (R&D) publications and patents pertaining to technology of interest.

Purpose of the study: Author aims are ultimately doing same analysis as presented above for application years 2010-2014 for GOOGLE, and compare technical field shifts and citation assignee shifts.

Benefits: Such a study would help GOOGLE Inc., in identifying new research areas and also utilize existing portfolios for pro-bono licensing and technology stewardship in cross industry sectors.

Such innovation maps present a holistic tools for scientifically identifying gaps in technology and opening new avenues of research.

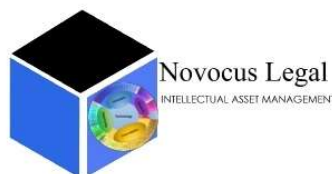
The report presented herein, would be focused on applications filed by google in year 2010. Data collected for this research and analysis is obtained from public domain and analytical tools and techniques employed by author have been developed by author through years of learning and experimentation.

Purpose of this report is to present to you a glimpse of what a detailed innovation mapping study can do for your organization’s licensing opportunities.

This reports includes following sections:

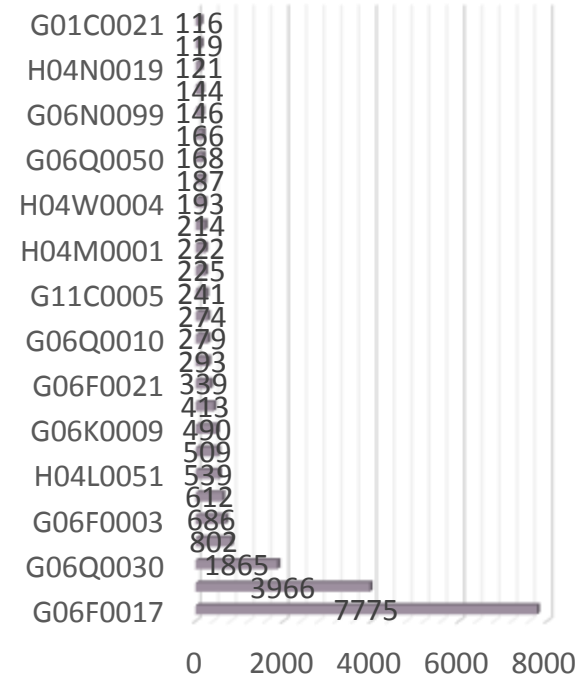
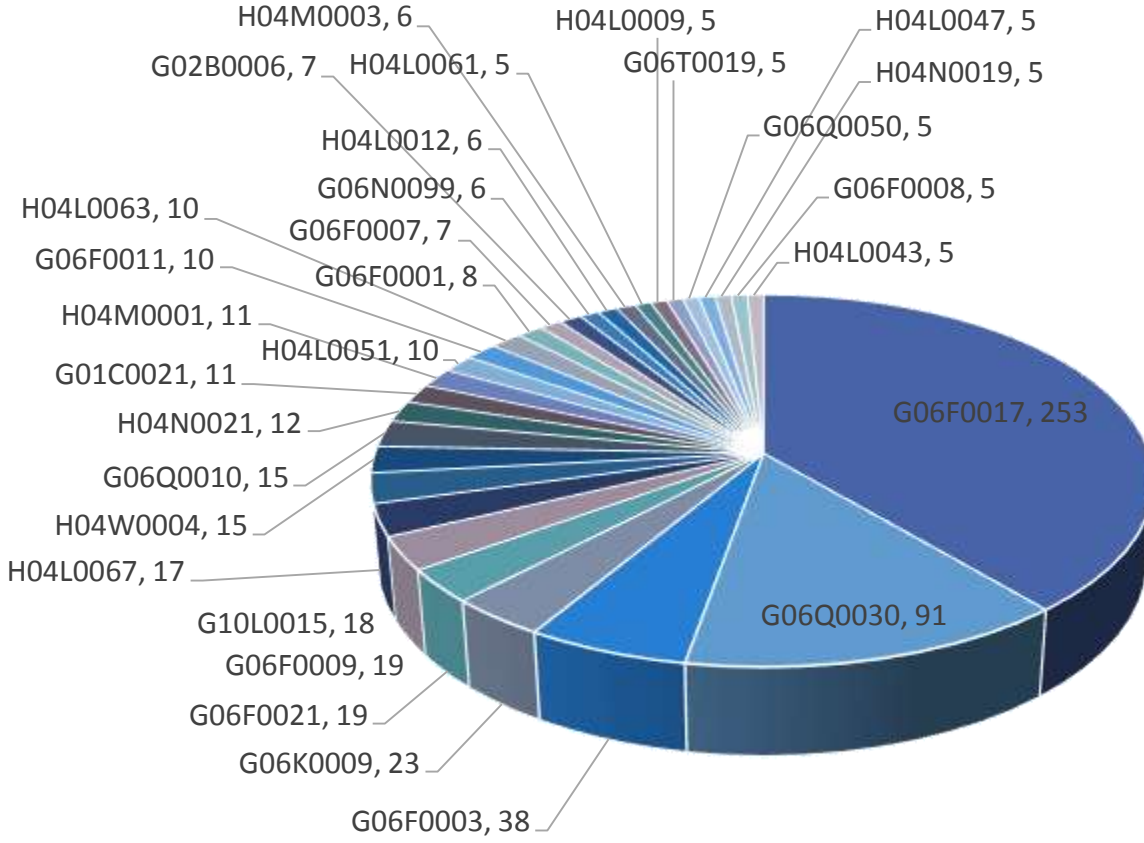
- 1. Analysis of applications filed in year 2010**
- 2. Backward Citation analysis**
- 3. Forward Citation analysis – generation 1**
- 4. Forward Citation analysis – generation 2 to observe code shifts.**
- 5. Lateral citation analysis for years 2010 and 2011**
- 6. Comparisons between first and second generation forward citations**

Author seeks feedback regarding utility and requirements for such reports in real time environment apart from academic enrichments and social welfare from use of technology.

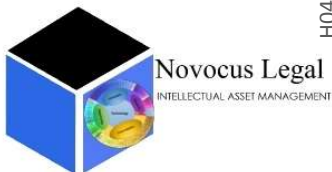
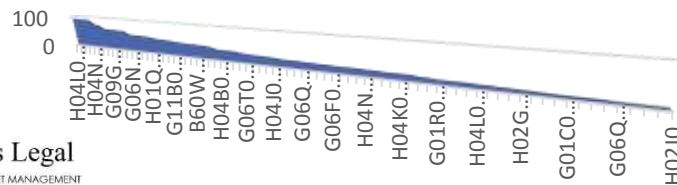


2010

Technical Field vs Number of Backward Citations - Above 100



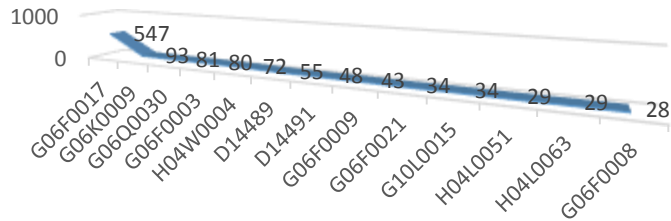
Technical Field vs Number of Backward Citations - Below 100



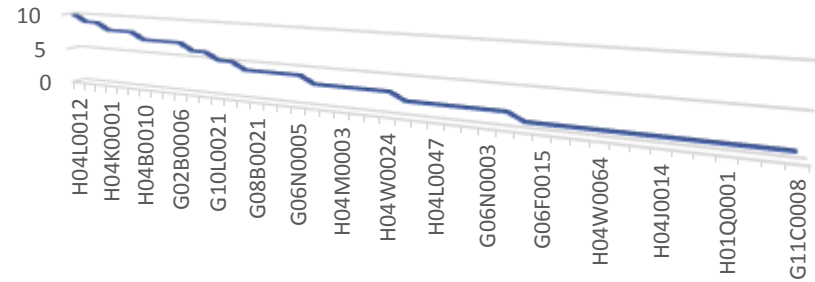
2010 – Forward Citation Count

Forward Citation Count gives an idea about which areas technology is venturing into from google to other assignees. Such indicators point towards technology development open avenues for societal growth and maximal benefit in terms of development from technology. All technical fields of patents are mapped against number of forward citations, respective to the patents. Such an analysis, provides which technical areas are exploited most and which are exploited least.

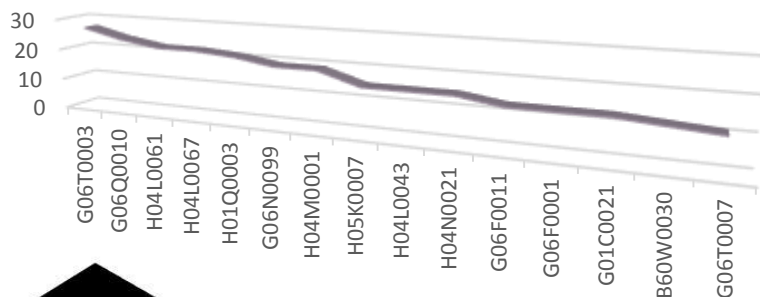
Highest number of forward citations



Forward Citation Below Average (1-10)

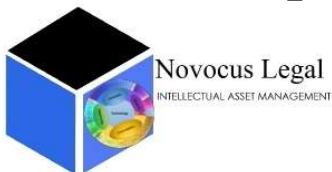


Forward Citations Average (10-30)



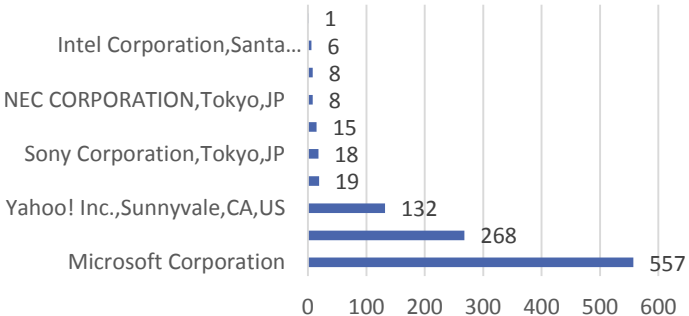
No Forward Citations in these Technical Fields

- G09B0021
- F24J0002
- H04H0020
- H04L0049
- H02J0013
- H02J0003
- H04N0001
- H04N0007
- G10L0025
- H04B0001
- G10L0013
- H04W0052
- G09B0009
- G01S0019
- B41J0002
- G09B0029
- A61G0009
- H04W0072
- H01R0035
- H04L0065

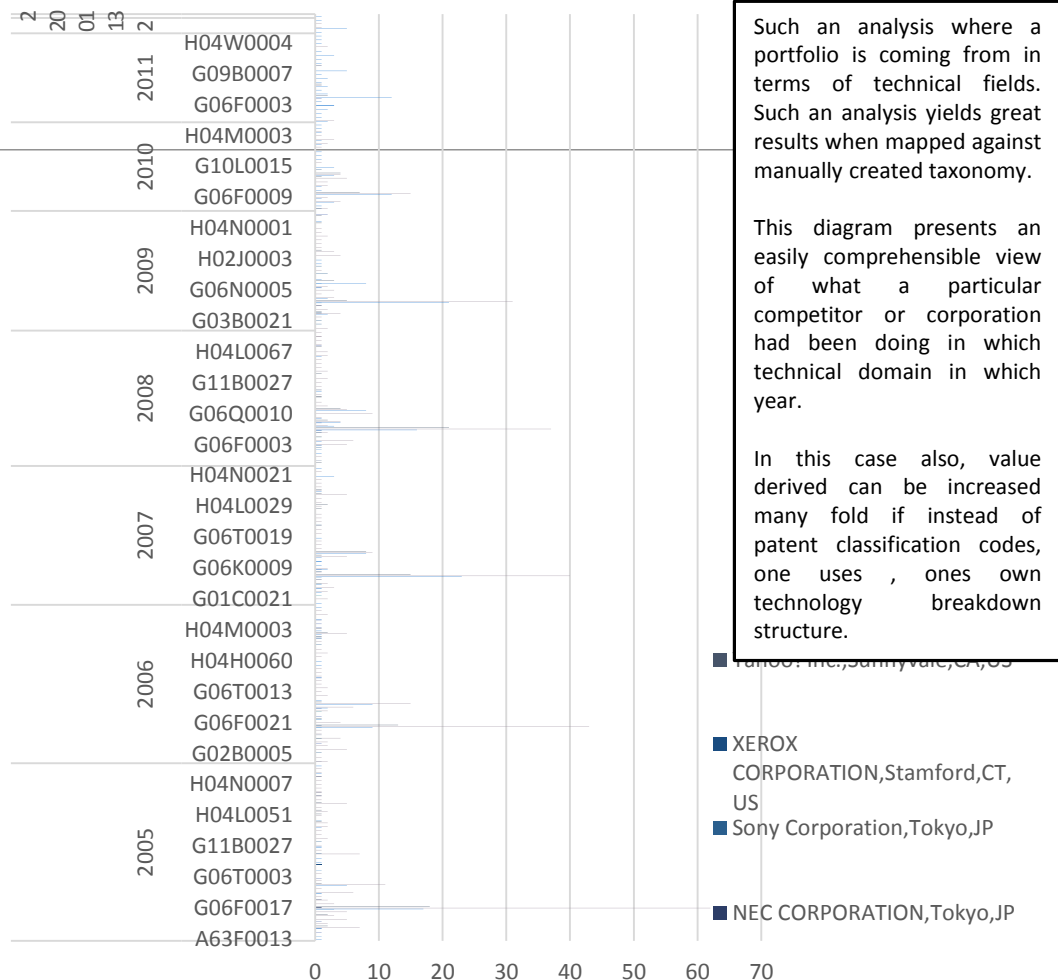
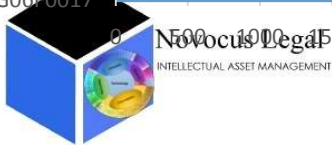
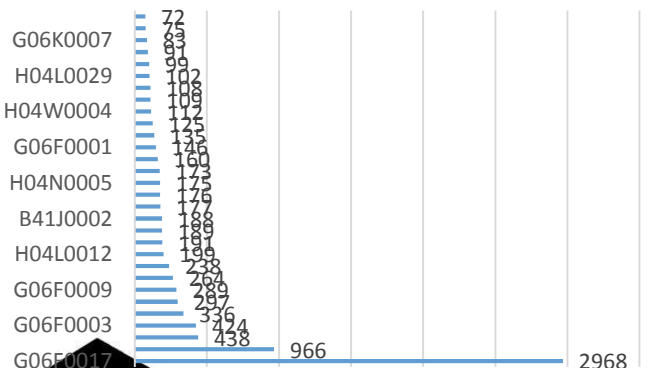


2010 - Backward Citation Analysis

Assignee Backward Citation - 2010



2010 -CPC - Backward Citations



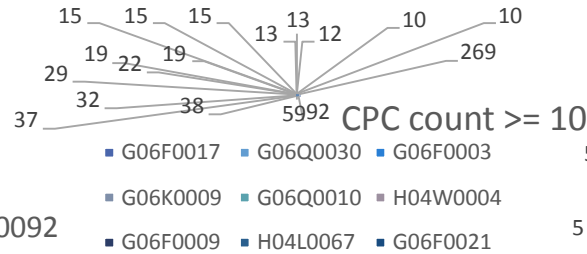
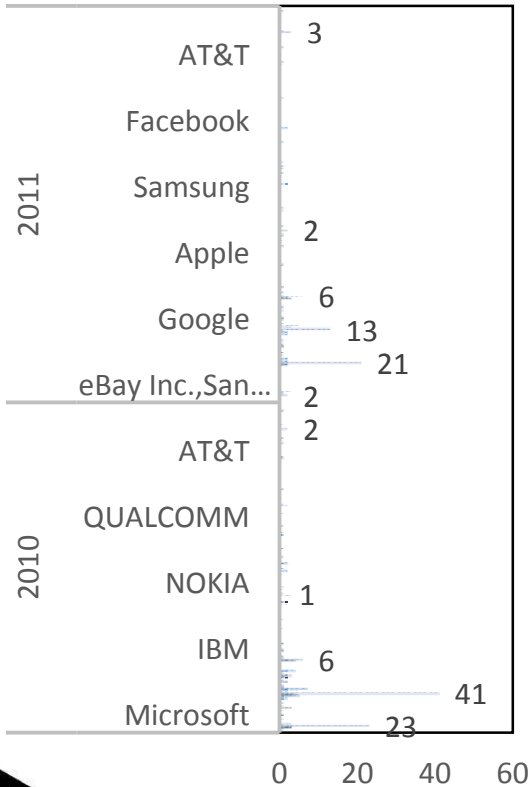
Such an analysis where a portfolio is coming from in terms of technical fields. Such an analysis yields great results when mapped against manually created taxonomy.

This diagram presents an easily comprehensible view of what a particular competitor or corporation had been doing in which technical domain in which year.

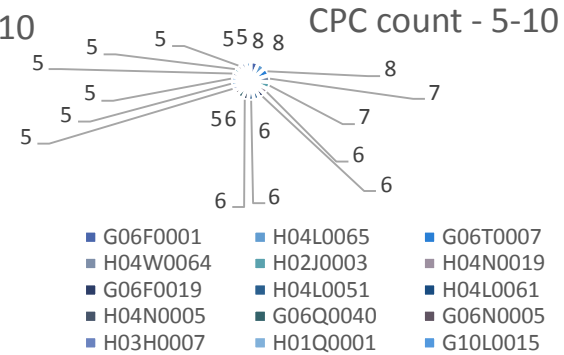
In this case also, value derived can be increased many fold if instead of patent classification codes, one uses , ones own technology breakdown structure.

2010 Lateral citation Analysis

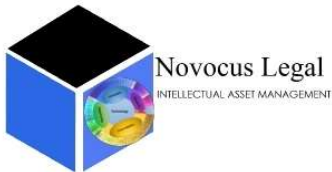
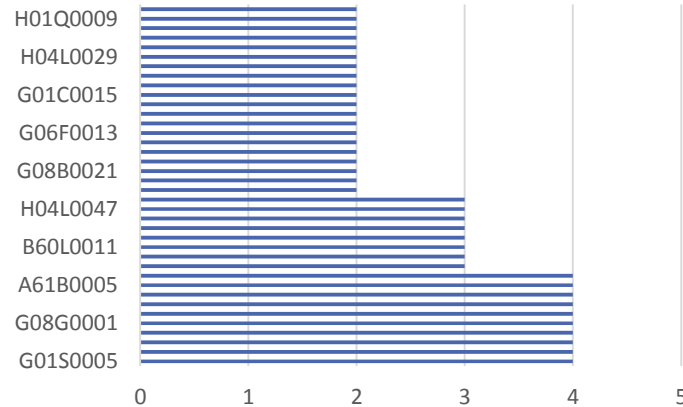
They are restricted to years 2010 and 2011 to maintain credibility flow of technology



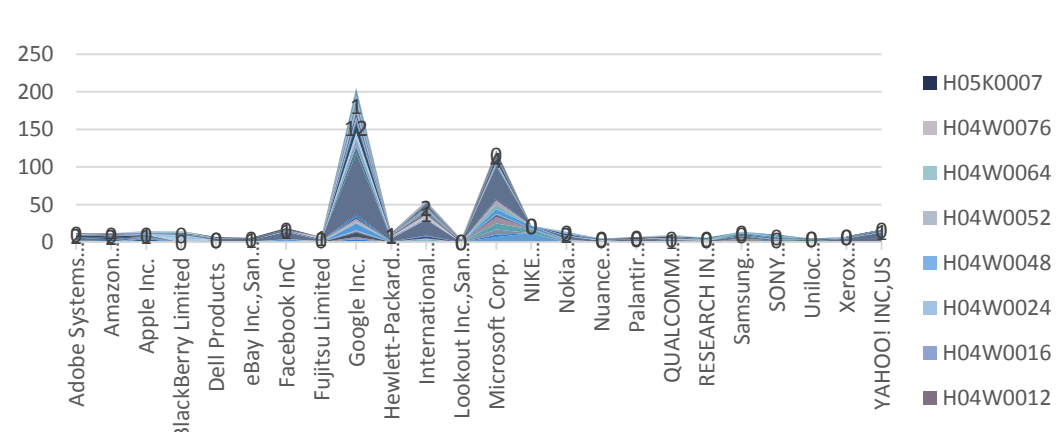
- H04W0092
- H04W0076
- H04W0064
- H04W0028
- H04W0024
- H04W0012
- H04W0004
- H04R0001
- H04N0021
- H04N0019
- H04M0007
- H04M0003
- H04M0001



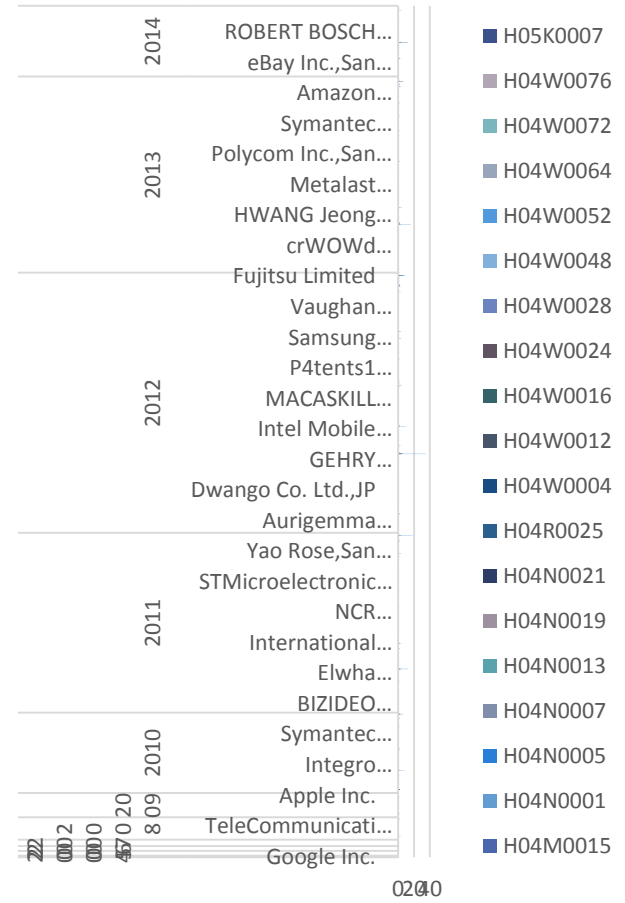
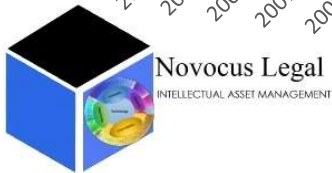
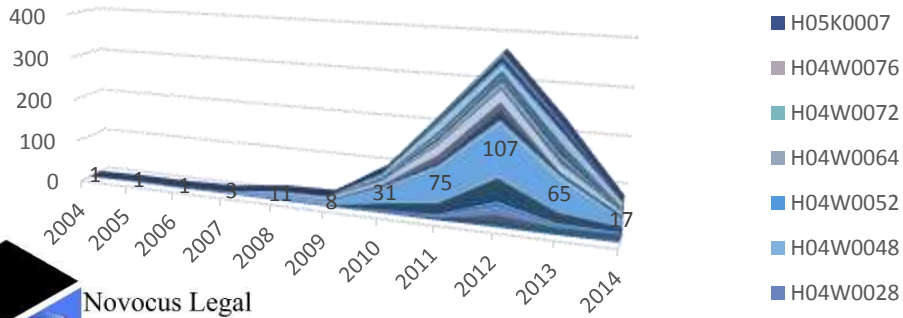
CPC Count - 2-4



2010 – Forward Citation Analysis – Generation 1

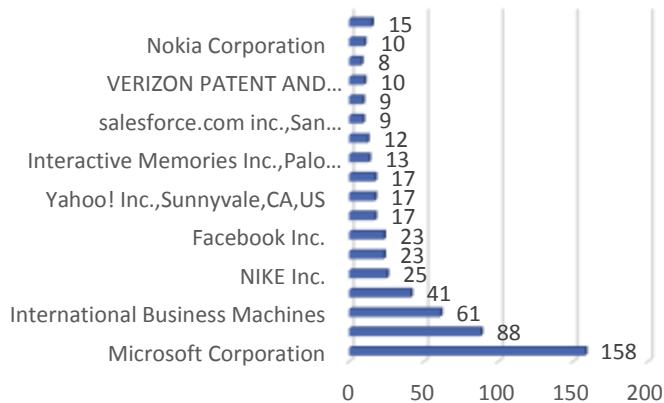


Technical field and assignee activity changes are observed indicating technology spillovers.



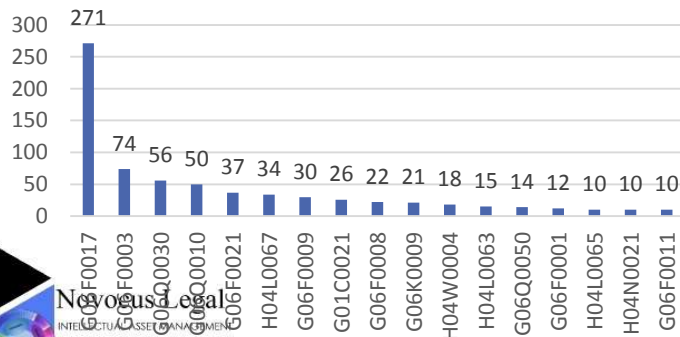
2010 – Forward Citation Analysis – Generation 2

Top Assignee Activity

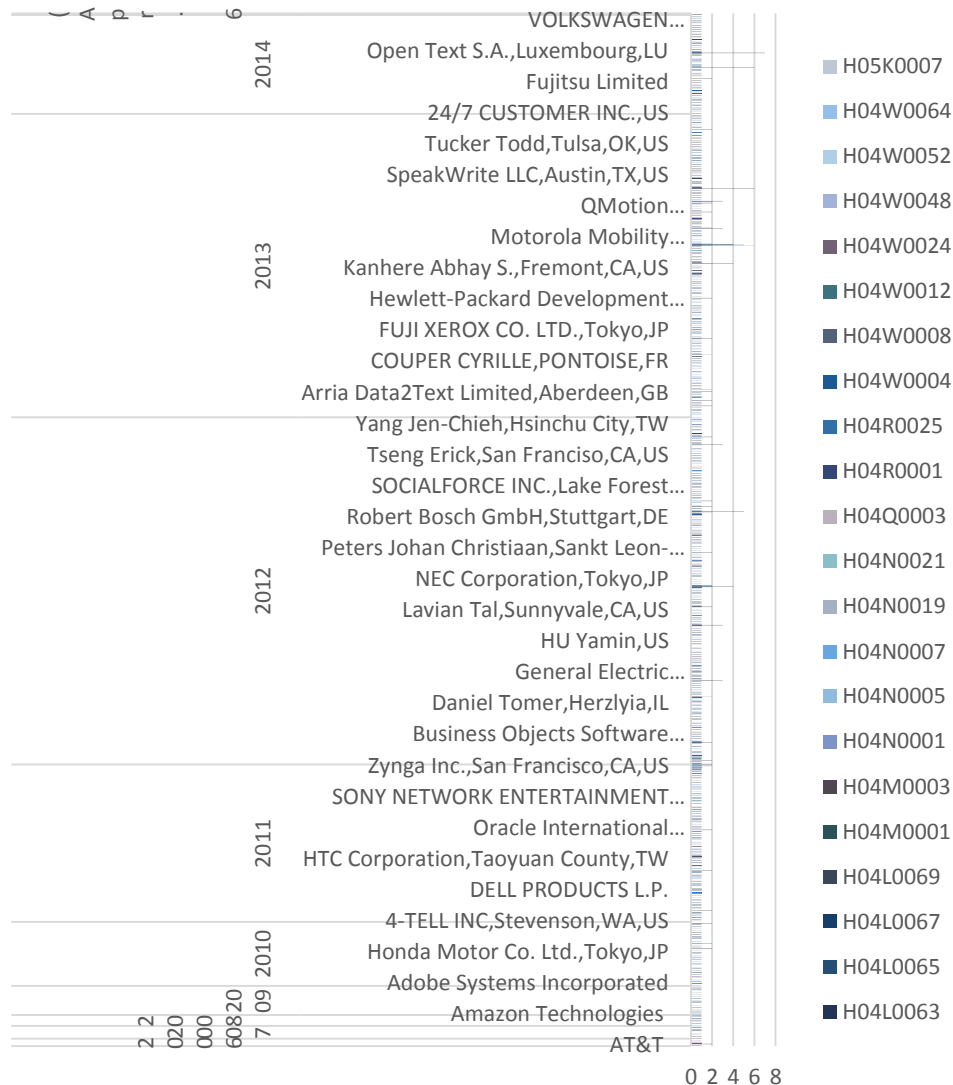


TECHNICAL FIELD AND ASSIGNEE ACTIVITY CHANGES ARE OBSERVED INDICATING TECHNOLOGY SPILL OVERS.

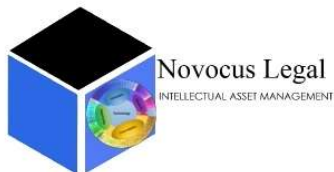
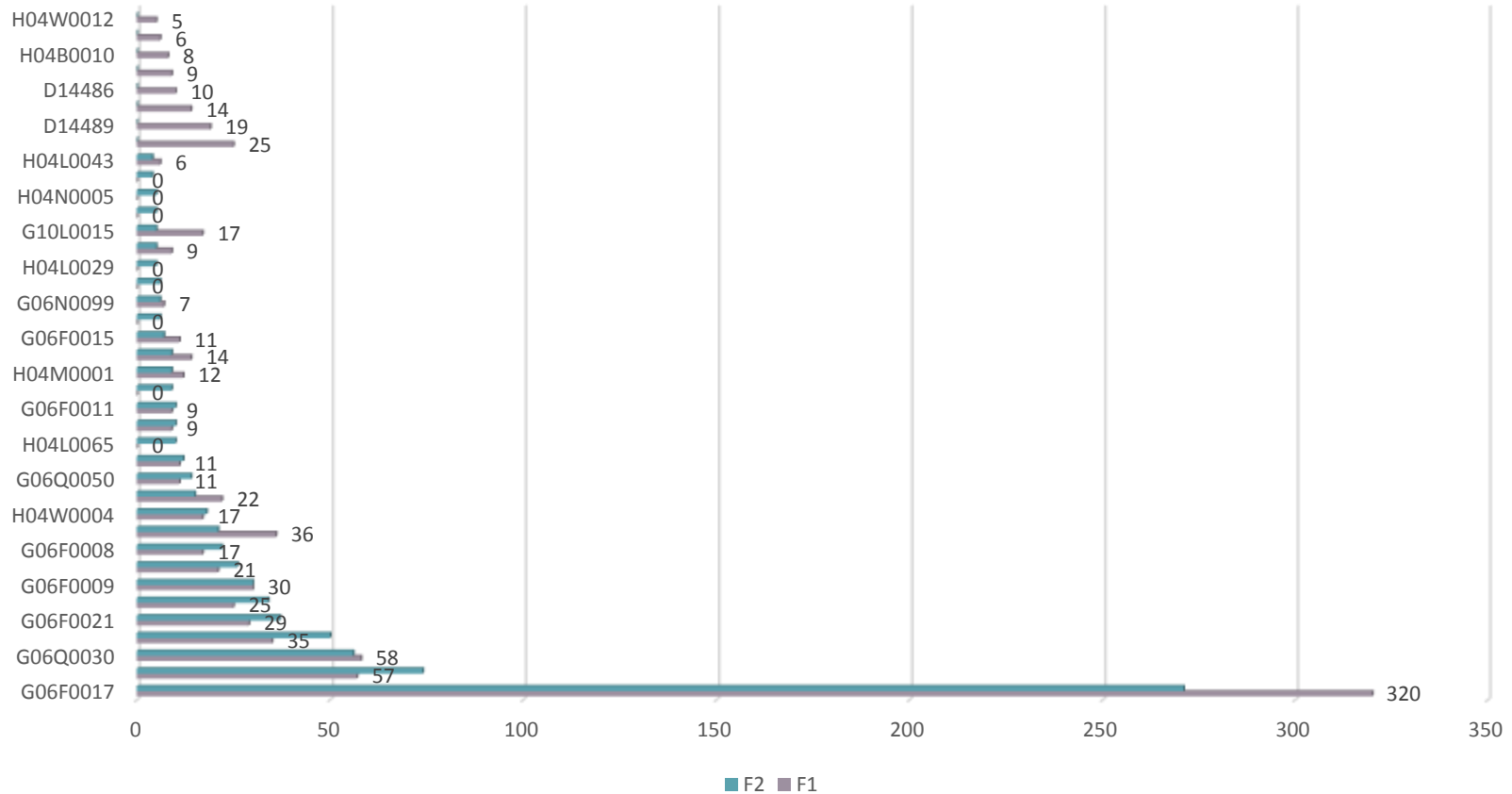
Top technical fields



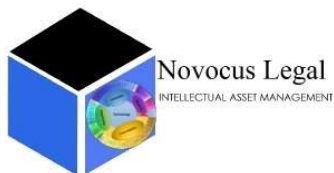
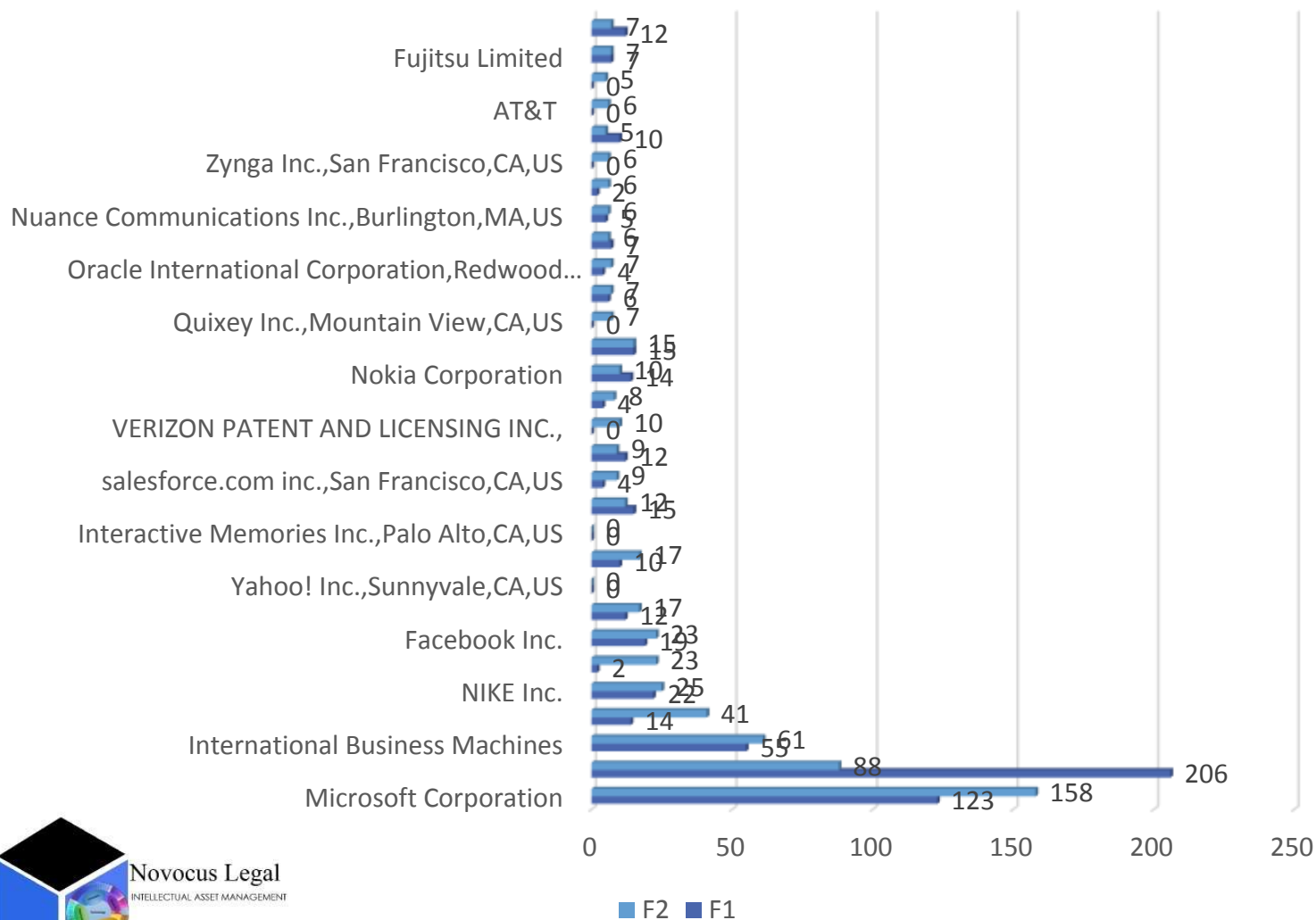
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Comparison of 2010 Application year technical fields for forward Citations



Comparison of 2010 Application year Assignee for forward Citations



About the Author

Mrs. Ruchica Kumar - An Intellectual Property professional and a registered patent agent who has been working in the highly specialized and focused field of Patent Management. As a registered patent agent she has drafted and prosecuted various patent applications. Her work is focused on technical and strategic facets of patent management involving patent analytics, acquisition and management. Her area of specialization is patent informatics wherein, she leverages technical aspects of patent drafting, patent valuation and patent citations to generate comprehensive patent intelligence data. Her sound technical skill set amalgamated with a strong patent knowledge base provides her good understanding of dynamics of cross industry innovation.

Her competencies include:

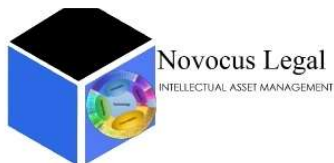
- Innovation Forecasting – Analyzing knowledge spill-overs and externalities for forecasting new innovation areas for an organization using patents as indicators
- Patent Drafting in fields of Medical surgical devices and implants, cardiac rhythm management devices, urology, gynecology.
- Patent Invalidation and Patentability assessment
- Technology infusion and diffusion studies using patents as indicators
- Licensing and Technology Transfer in fields of general engineering
- Indian Patent filing and prosecution
- Technology Mapping
- Pre-litigation due diligence

Author is currently living in New Delhi, India and plans to open patent analysis and research center in California, USA. This center would cater requirements of USA based companies with regard to innovation maps, patent searches, infringement analysis and the like.

Author humbly requests you to present an opportunity to interact on a personal level if possible and explore a business opportunity.

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- We welcome any queries from Venture Capitalists, Entrepreneurs, Organizational Directors, IP Managers, Inventors or IP Attorneys relating to issues of Intellectual Property.
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