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VEPACHEDU EDUCATIONAL FOUNDATION

## The Andhra Journal of Industrial News

IP and Industry News

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### **Chinese Innovation**

"The World's Factory" wants to be the World's Innovator. Indigenous innovation is a national strategy put forward by the Chinese government for the purpose of promoting the development of domestic technological innovation, eventually leading to the ownership of their own core IP rights. In February 2006, the State Council issued both "The Guiding Principles of Program for Mid-to-Long Term Scientific and Technological Development (2006-2020)" and a notification about a number of accompanying policies on the implementation of the above program. Improving indigenous innovation is made the most important aspect of all science and technology related work and the promotion of 'indigenous innovation' is to be carried out through tax incentives, financial support and technological investment. In December 2006, "*Methods for Determining the National 'Indigenous Innovation' Products (Trial)*" stipulated the norms and procedures by which 'indigenous innovation' products can be recognized. In 2009, Explanatory Report Regarding the National 'Indigenous Innovation' Products was issued. This year, the *2010 Notification Regarding the Development of Determining 'Indigenous Innovation' Products (Draft Seeking Opinions)* was issued relaxing the requirements for 'indigenous innovation' IP. The products of six high-tech industries were recognized as products of 'indigenous innovation', namely computers, telecommunication installations, modern office equipment, software, new

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5112 *Kali Era, Vikruthi Year, Bhadrapada month*  
2068 *Vikramarka Era, Vikruthi Year, Bhadrapada month*  
1932 *Salivahana Era, Vikruthi Year, Bhadrapada month*  
2010 AD, September

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energy, and energy saving products. The national list of products of 'indigenous innovation' is still unpublished.

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### Immigration Costs Increase for US Industry

President Obama signed into law a bill earmarking \$600 million to procure additional personnel and technology to improve border security. To fund this initiative, the law almost doubles the fees for H-1B and L visa applications for the next four years. The increased application fees apply to any applicant company that employs 50 or more employees in the U.S. if more than 50% of its employees are non-immigrants with H-1B or L visas. The fee for H-1B visa applications (for temporary skilled workers) was increased by \$2,000, while the fee for L visa applications (for multi-national transferees) was increased by \$2,250. Based on the language in the new law, these fee increases appear to apply only to applications for new visas, but not to renewal applications.

NASSCOM (<http://www.nasscom.in/>), a global trade body with more than 1200 members, which include both Indian and multinational companies that have a presence in India, called the bill indirect protectionism that will hinder the free movement of people essential for promotion of free trade and lead to diminished inflows of Indian talent which is helping to drive U.S. tech innovation and spur U.S. recovery. India's commerce minister estimated that the increased visa fees could cost Indian companies over \$200 million a year and have an adverse effect on the competitiveness of Indian companies sending professionals to the US.

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### Light Test for Diabetes

Scientists at the Massachusetts Institute of Technology are trying to use light so people with Type I diabetes can test their blood sugar levels with light, instead of with a needle, a painful and burdensome task they must do. Light is already used for purposes such as activating medicines after a drug reaches a certain part of the brain, hardening dental sealants on teeth and during eye surgery like LASIK. There have been disappointments as well, such as failed attempts to use lasers to remove plaque from arteries. MIT scientists are building huge mechanical contraptions with light using mirrors, crystals and cameras. One device that researchers have been trying to fashion for years is a non-invasive monitor that measures blood sugar simply by touching a light "wand" to the forearm. It uses a type of light, known as near infrared, also used in television remote controls.

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### New Obviousness Standards

The recent USPTO Guidelines renewed emphasis on the principles of *Graham* and the abrogation of the strict TSM test have clearly impacted the examination of patent applications, but the Guidelines also suggest that the obviousness inquiry has remained the same, to a significant extent, since the *KSR* decision. The Guidelines review Federal Circuit cases on combining prior art elements, substituting one known element for another, establishing the obvious-to-try rationale, and considering evidence submitted by applicants. A summary table for each cited case is available in the guidelines in the *Federal Register* at <http://edocket.access.gpo.gov/2010/pdf/2010-21646.pdf>.

### WIPO's IP Advantage Database

WIPO has made considerable progress in the last year in enhancing the availability of knowledge and in contributing to the development of a global technical infrastructure. The role of innovation in promoting economic growth and competitiveness as well as the significant changes in the dynamic global innovation landscape were the focus of remarks by WIPO Director General in his opening statement to the annual meetings of the member states of the World Intellectual Property Organization (WIPO) which ran from September 20 to 29, 2010. Mr. Gurry addressed his remarks to some 70 ministers who will be exploring the theme "Innovation, Growth and Development: The Role of Intellectual Property and Member States' National Experiences" in a two-day high-level ministerial segment.

"Innovation is central to economic growth and to the creation of new and better jobs. It is the key to competitiveness for countries, for industries and for individual firms. It is the process by which solutions are developed to social and economic challenges... the reason why we have intellectual property, which provides the incentive for the significant investment of time, effort and human and financial resources associated with the process of innovation and its many benefits. ... the journey from idea to commercial reality which had led to a broadening of the understanding of what constitutes innovation. In addition to technology, it is increasingly acknowledged that organizational, marketing and design knowledge are vital to successful innovation. Intellectual property is also central to these other dimensions of the enlarged notion of innovation.... Both the geography of innovation and the means by which innovation occurs are changing, overturning many of our assumptions and expectations..... Trends in economic growth and patterns of investment in education and research and development make it clear that further continental shifts will occur in the world of innovation and that the map of innovation will



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continue to evolve...; open innovation, where enterprises and institutions look outside themselves to satisfy their innovation needs – a trend which has been fostered by the increasingly “networked and connected economy.... These changes in the innovation landscape have given more importance to WIPO’s role in developing and coordinating global infrastructure” which was “an increasingly fertile” dimension for effective international cooperation. Such cooperation offers an opportunity to increase the participation of the least developed countries and developing countries in global innovation and to reduce the knowledge gap. It also offers a “very effective means of improving both the efficiency of the work of patent offices in support of innovation and the quality of their output....”

[http://www.wipo.int/pressroom/en/articles/2010/article\\_0034.html](http://www.wipo.int/pressroom/en/articles/2010/article_0034.html)

WIPO has launched *IP Advantage*, a new database which profiles the intellectual property (IP) experiences of inventors, creators, entrepreneurs, and researchers. This tool aims to promote a better understanding of how IP is created and protected, and how inventors, creators and society at large benefit from the IP system. The IP Advantage database provides a one-stop gateway to case studies that chronicle the intellectual property (IP) experiences of inventors, creators, entrepreneurs and researchers from across the globe. The case studies offer insights into how IP works in the real world and how its successful exploitation can contribute to development.

IP Advantage is a joint project developed by WIPO’s Communications Division and the WIPO Japan Office, based on a proposal from Japan and supported by the Japan Funds-in-Trust for Industrial Property. It aims to promote a better understanding of how to create and protect intellectual property and reap the benefits provided by the IP system. <http://www.wipo.int/ipadvantage/en/>

### Alzheimer’s Disease

Alzheimer's disease is a progressive brain disease affecting up to 5.3 million Americans and the seventh-leading cause of death in the United States. It destroys brain cells causing memory loss and problems with thinking and behavior. There is no cure and marketed drugs offer temporary moderate efficacy.

“Iron-export ferroxidase activity of beta-amyloid precursor protein is inhibited by zinc in Alzheimer's Disease” published in *Cell*, adds a third metal-dependent event, iron accumulation, which if left untreated, contributes to neuronal death in the Alzheimer's brain. The evidence published in *Cell* shows that the source of beta-amyloid, the beta- amyloid precursor protein (APP), plays a hitherto unknown critical role in exporting iron out of neurons. If APP fails to carry out this role, iron builds up in



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the neurons contributing to oxidative stress, neurofibrillary tangle formation and ultimately neuronal cell death. Importantly, Prana scientists have demonstrated that synaptic zinc can prevent APP from performing its normal iron transporting role. Synaptic zinc levels and distribution changes in the Alzheimer's diseased brain, because zinc released into the synaptic space is drawn into the beta-amyloid that forms plaques in the synapse. This is problematic for the brain because neurons are deprived of the zinc required for neurotransmission and the zinc induces toxic beta-amyloid oligomer formation.

Moreover, as now indicated by the **Cell** publication, the zinc caught up in the beta-amyloid can be exchanged or transported to the APP, impeding its ability to prevent iron buildup in neurons. Accordingly, the maintenance of correct zinc levels in the brain is vital for neuronal function and ultimately cognition. [http://www.cell.com/abstract/S0092-8674\(10\)00938-4](http://www.cell.com/abstract/S0092-8674(10)00938-4).

A protein, called gamma-secretase activating protein (gSAP), is expected to become a major target for anti-amyloid drugs that inhibit the brain's ability to produce toxic beta amyloid in Alzheimer's disease. Beta-amyloid is a substance found in the brain that becomes toxic in Alzheimer's disease and is responsible for most of the devastating symptoms of the disease. The researchers also discovered that gSAP is a target of the anti-cancer drug, Gleevec, which Fisher scientists previously showed could lower beta-amyloid levels in the brain. The new study showed that Gleevec lowers beta-amyloid production by binding to gSAP and preventing it from activating an enzyme called gamma-secretase, which is responsible for producing beta-amyloid. In addition, the researchers showed that the inhibition of gSAP is not toxic to nerve cells, unlike many other experimental beta-amyloid inhibitor drugs that produce severe toxic reactions. Hence, gSAP holds the promise of discovering highly specific anti-beta-amyloid drugs that will be safe to patients.

mGluR2 is a G-protein coupled receptor (GPCR) that is expressed in the brain on presynaptic nerve terminals where it slows glutamate release. Research has shown that too much signaling by mGluR2 may negatively impact the survival of brain cells involved in memory, contributing to the cause of Alzheimer's disease.

### Mild Cognitive Impairment

Mild cognitive impairment may be more common in men than in women, a new study from a single Minnesota county of mostly white community, published in Neurology shows. Amnesic mild cognitive impairment -- considered a precursor of Alzheimer's disease -- was the most common type, with



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a prevalence of 11.1%. Non-amnestic MCI occurred at a prevalence of 4.9%. Men were at greater risk of the disease -- with a 1.54-fold increase compared with women (95% CI 1.21 to 1.96). The researchers said this finding has not been observed consistently in other studies, but they also noted that definitions of MCI differed among studies, and this one was strengthened by conducting in-person evaluations. The association remained essentially unchanged after several demographic and clinical variables and APOE genotype were accounted for. This may suggest that women transition from normal cognition directly to dementia at a later age but more abruptly, they added. The prevalence of MCI also decreased with increasing number of years of education, from 30.2% in those with fewer than nine years to 11% among those with more than 16 years. It also increased with age.

And it was higher in those who never married as well as in those with an APOE genotype of \*3\*4 or \*4\*4.

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**Source:** *The primary sources cited above, BBC News, New York Times (NYT), Washington Post (WP), Mercury News, Bayarea.com, Chicago Tribune, CNN, USA Today, Intellihealthnews, Deccan Chronicle (DC), the Hindu, Hindustan Times, Times of India, AP, Reuters, AFP, Biospace etc.*

**Notice:** *The content of the articles is intended to provide general information. Specialist advice should be sought about your specific circumstances.*

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