

Monthly Newsletter from Effectual Services Dear Readers,

Welcome to NewsEffect – May 2022

Newsletter Contents

- Green Packaging
- Disruptive Technology Leads
- IP News
- Effectual at Glance
- Innovation at Effectual

Green Packaging



- With the acquisition of plastic-free product wrapping developer

 Choose Packaging, multinational printing company HP has boosted its intentions to disrupt the eco-friendly packaging sector.

 Choose Packaging, which was acquired for an unknown sum, specializes in the development of all-natural paper-based alternatives to plastic bottles. HP hopes to develop innovative packaging solutions that better serve a \$10 billion market by acquiring and merging the company into its Personalization & 3D Printing division, which currently contains its Molded Fiber Tooling offering.
- In April 2022 Tanveer Bilal Pirzadah, Bisma Malik, Rouf Ahmad Bhat, Khalid Rehman Hakeem published an article on Green and Smart Packaging of Food which discloses about the concept of green packaging implying that sustainable packaging materials having a minimum impact on the environment, human health and safety. The mechanical properties of biodegradable materials depend on chemical composition, polymer architecture, processing conditions, storage and aging. Barrier properties of food packaging materials are critical if a prolonged shelf life is to be maintained. Green packaging materials with active properties can extend shelf life of the foods by preventing microbial and chemical deterioration. To evaluate the environmental performance of a green packaging material, life-cycle assessment is standardized in ISO 14000 and ASTM D7075. The last category of smart packaging systems is data carriers which are used to improve information transfer efficiency and good communication between the manufacturer and the customer. Food packaging materials are generally categorized as either glass, metal, paper or plastic, and of these plastic materials have been researched most intensively to improve sustainability.
- The Guidelines on Extended Producers Responsibility on Plastic Packaging have been published by India's Ministry of Environment, Forest and Climate Change under the Plastic Waste Management Rules, 2016. With effect from July 1, 2022, the rules on extended producer responsibility, as well as the prohibition of specified single-use plastic items with low usefulness and high littering potential, are essential measures in reducing pollution caused by littered plastic waste in the country. The Guidelines establish a framework for strengthening the circular economy of plastic packaging waste, promoting the development of novel plastic alternatives, and laying out the next steps for firms to move toward sustainable plastic packaging.
- Honeywell has partnered with TotalEnergies to turn previously non-recyclable plastic trash into environmentally friendly packaging. Total Energies has committed to buy Honeywell's innovative Recycled Polymer Feedstock and transform it into virgin-quality polymers that may be used in a variety of applications, including flexible and rigid food-grade packaging containers and other high-demand items. TotalEnergy will produce the polymers in its European manufacturing facilities.
- The global green packaging market size is expected to grow from USD 210.4 billion in 2020 to USD 319.3 billion by 2027, at a CAGR of 7.2% from 2021 to 2027. As the demand for packaging grows across all end-user industries, so does the amount of packaging waste produced. Furthermore, in response to rising concerns about single-use packaging waste, a number of nations around the world are prohibiting the use of single-use plastic.

Disruptive Technology Leads



On May 17, 2022 researchers in China disclosed about a contact lens to detect an increase in intraocular pressure and release an anti-glaucoma medicine if the pressure rises over a set threshold. As the pressure inside the eye rises, the distance between the upper and lower lenses narrows. A cantilever is used by the pressure sensor to detect the pressure, then transmits a signal to the wireless system, which causes an anti-glaucoma medicine to be released from a hydrogel linked to an electrode enabling it to cross the cornea of the eye. The lens arrangement gives the impression that the wearer has golden irises. According to the scientists, the design allows for the essential components to be integrated in the device without obscuring the wearers view or irritating the eye.



- Volvo Cars has made an investment in a breakthrough battery technology company StoreDot, an Israeli company, that could see its future electric vehicles get nearly 100 miles of range from a five-minute charge. StoreDot is working on a pioneering technology that, according to the company, should result in batteries that can charge to 99 miles (160km) of pure electric range in just five minutes. The investment gives Volvo Cars the opportunity to collaborate closely with StoreDot on exciting new battery technology, as it aims to become a pure electric car company by 2030
- Google is currently working on integrating snore and cough detection in Pixel and/or Android phone. The sleep and snore algorithms will translate likely into bedside monitoring feature for Android and or Pixel.



On May 23, 2022 researchers introduced **a** programmable DNA sequence called <u>Gene Drive</u> to reduce the number of malarial mosquitoes. The advancement will prevent mosquitoes from producing female offspring.



- A bunch of physicists has taken some innovative steps in order to develop computer network of nextgen at the Delft University of Technology in the Netherlands. The technology is called <u>quantum teleportation</u> which is able to send data across three physical locations at a time. Whereas, it has been possible with considering two locations only till now.
- Accordingly, the Quantum teleportation technology works in the direction of not only moving the data between quantum computers, but it also does so in such a way that no one can intercept it physically. Thus it changes the perception and the technology of the way data travels from one location to another as the security dimension has also been added into the transfer mechanism.
 - Northwestern University engineers has built tiniest ever remote-controlled walking robot in the shape of crab. The tiny robot sizes only half of the millimeter only (size of a flea) and it is able to perform many actions such as bending, twisting, crawling, walking, turning, and even jumping.

The shape-memory alloy material was used for building the robot that converts to its recalled shape when heated. For quick and consistent heating, the developers used LASER beams at different spots of the body of the robot. When the temperature decreases and the robot gets cooled down, the thin layer of glass returns the deformed component of the structure to its original shape. The LASER scanning direction also determines the walking direction of the robot.

IP News



- Immersion Corp. (NASDAQ:IMMR) has filed a complaint against Meta Platforms (NASDAQ:FB) in U.S. District Court, accusing the company of violating patents covering "haptic" effects in augmented reality and virtual reality. Immersion says that Meta's AR/VR products, including the popular Meta Quest 2 headset, infringe six of its patents covering haptic effects (that is, touch feedback technology). It's looking both to enjoin Meta from further infringement, and to "recover a reasonable royalty" for the alleged infringement.
- In May 2022, <u>Toshiba</u> is stepping up its patent disposals, with recent transfers highlighting two potential areas in which more of its IP could hit the secondary market: wireless communications and LEDs.
 - A patent licensing dispute over microchips in cars has caused legal trouble in Germany for the US carmaker in May 2022. Germany has notoriously strict patent laws. A judge in a Munich court ruled Friday that Ford Motor Company will not be able to sell or manufacture vehicles in Germany if it doesn't settle a dispute over microchips, according to German media. Ford is said to have 4G cellular chips built into its vehicles for which the company has not paid licensing fees. The ruling, which is subject to appeal, could be enforced in two weeks if Ford does not reach a settlement with the plaintiffs. ord is being sued by eight owners of 4G mobile communications patents

- J&J (Johnson & Johnson) and Momenta Pharma have filed patent infringement lawsuit against Homegrown pharma firm Natco and their marketing partner Mylan Pharmaceuticals Inc.

 The allegation is about infringing of two old patents associated with 20mg/ml and 40mg/ml Glatiramer Acetate injection, Natco said in a regulatory filing. The injection is used to treat relapsing forms of multiple sclerosis in adults. The lawsuit is filed in Pennsylvania Federal Court. Mylan and Natco believe that they will definitely be able to strongly defend against this filed suit.
 - \$300M in damages in a patent infringement case. The Texas US District Court denied Apple's motion for a new trial and judgement as a matter of law. Optis Wireless Technology, LLC, along with several of other Optis companies, sued Apple in 2019 alleging the iPhone-maker infringed upon seven of Optis' patents. Following trial, in August 2020 a Texas federal jury found that Apple willfully infringed certain claims of the five asserted patents.
- In a practice to increase the protection of geographical indications (GI) products in Philippines, the IP office of Philippines (IPOPHL) has issued implementing rules and regulations (IRR) on GI. The IRR is crucial for establishing competitive edge of local and indigenous products as per the Director General of IPOPHL. The GIs as defined in IRR draught means "any signal that identifies good as originating in a country, region, or town where the good's quality, reputation, or other attribute is mostly due to its geographical origin and/or human elements."

GLANCE @ EFFECTUAL



Our Best Practices in Patent Drafting and Patent Prosecution Services

In Patent Drafting and Patent Prosecution, different practices and strategies are followed. For example, while drafting patent applications, Patent claims are considered as the most critical part followed by the rest of specification. Patent claims are the most important part, as they define the invention for which the protection is sought. Further, patent claims identify what the patent application is covering and what is the scope of the Invention. For drafting a fine patent application, one should have a thorough understanding of the guidelines proposed by the specific jurisdiction, such as USPTO, EPO, IPO, and WIPO. Further, there is a need to have a clear and crisp understanding of the disclosure (invention) and its existing technological aspects. Because, once you have a clear concept of what the inventor/client has invented or what he/she want to protect, then and only then you can specifically perform a prior art search and then draft a claim(s) specifically pointing out distinctive features which are novel and non-obvious to any person skilled in the pertinent art.

We at Effectual Services follow a three level preparation and review system, in which the whole patent application/specification is thoroughly understood. In this system, a first level is preparing a clear understanding of the disclosure and discussing with each other about some left out points (if any). Thereafter, a set of claims is prepared and subsequently reviewed, and once the claims are set, then the rest of specification is prepared. A second level is to review what has been drafted, and amending/rectifying/correcting the patent specification, if needed. A third level, namely brushing-up level, is a level in which the whole patent specification, including the drawings, is given a final touch, by reading the complete specification as a technical person and also a layman. This three level system, has always produced the finest patent applications. One more advantage of the three level system, is, after filing, less number of rejections/objections are received.

On the contrary, during the patent prosecution, we follow a different level of strategy to protect what has been draft or filed. So, during the patent prosecution, a number of objections may be given by the Examiner to prove and amend specification in a desired manner. Following the three-level system, less or none miscellaneous objections are given by the Examiner. However, one specific thing should be noted, to produce a strong technical argument when arguing objections such as, novelty step and inventive step/obviousness step. This strong technical argument should be clear in understanding of the Examiner, and there is a chance where you can build a case for granting the patent application.

DISCLAIMER: THE INFORMATION HEREIN IS MEANT ONLY FOR GENERAL READING PURPOSES AND CONTAINS ALL FACTUAL AND STATISTICAL INFORMATION PERTAINING TO INDUSTRY WHICH HAVE BEEN OBTAINED FROM INDEPENDENT THIRD PARTY SOURCES AND WHICH ARE DEEMED TO BE RELIABLE. EFFECTUAL SERVICES DO NOT IN ANY MANNER ASSURES THE ACCURACY OR AUTHENTICITY OF PROVIDED DATA AND INFORMATION.

INNOVATION @ EFFECTUAL



At Effectual Services, we firmly believe that Information and communications technology plays a profound role in any business growth. Hence, we have developed in-house project management tool that enables us to easily track tasks, projects, and employee's growth. By focusing on the right metrics, KPIs, and data, we are able to understand the progress of the projects and make informed decisions for our customers. Our comprehensive solution combines projects & tasks, contact management, team collaboration, billing, and reporting under one umbrella. With predefined roles and responsibilities, our project management tool strictly enforces information security policies and helps achieve our security commitments promised to our customers.

DISCLAIMER: THE INFORMATION HEREIN IS MEANT ONLY FOR GENERAL READING PURPOSES AND CONTAINS ALL FACTUAL AND STATISTICAL INFORMATION PERTAINING TO INDUSTRY WHICH HAVE BEEN OBTAINED FROM INDEPENDENT THIRD PARTY SOURCES AND WHICH ARE DEEMED TO BE RELIABLE. EFFECTUAL SERVICES DO NOT IN ANY MANNER ASSURES THE ACCURACY OR AUTHENTICITY OF PROVIDED DATA AND INFORMATION.

USA

Suite-427,425 Broadhollow Road, Melville | NY-11747 +1-972-256-8133

INDIA

SDF A-05, NSEZ, Noida–Dadri Road, Noida Phase II -201305 Unit No: 402, 4th Floor, Tower-A, Bestech Business Tower, Sector-66 Mohali, Punjab – 160066, India +91-120-4522210

SINGAPORE

531A, Upper Cross Street, Singapore- 051531 +91-120-4522211

info@effectualservices.com





SAN FRANCISCO & NEW YORK (U.S.A) | LONDON & STUTTGART (EUROPE) | NOIDA & MOHALI (INDIA) | SINGAPORE

We are a global research & consulting firm, with a specialization in Intellectual Property (IP) Management, enabling Fortune 500's, law firms, patent owners, inventors, research institutes, universities & venture capital / PE firms, to protect their IP, discover its inherent value and generate revenue