

Press Note

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P Mohan Aditya, student of SRM University, AP granted copyright for Design of Face Shield

SRMAP student P Mohan Aditya awarded with copyright for the design of Biodegradable "Face Shield for Humans"

When the Covid-19 outbreak crippled the world, P Mohan Aditya, a 3rd-year Mechanical Engineering student from SRM University, AP, took giant steps into developing the highly useful face shield made from bio-degradable substances. He named it "Facial Shield 2.0, as it was an improved version of the ordinary face shields. The innovative features added to it helped him to earn the copyright to his credit. On May 16, 2020, Aditya filed an application on the face shield design under the IPR (Intellectual Property Rights) with Indian Patent Office located in Kolkata, India. In 2021, a copyright was granted for the "Face Shield for Humans" with a Design Application Number of 329364 – 001.

The face shield 2.0 serves as the outer defence to the mucous membranes (nose, eyes, and mouth), come with a transparent visor made of the thin layer of 175-micron reusable plastic and a highly durable headband made from 3 ply corrugated cardboard. The cardboard's bursting strength is 16kg/sq.cm, which is quite durable yet lightweight. Due to the use of biodegradable materials, the price of the face shield at an affordable cost of INR 15. The face shield 2.0 is adjustable and suitable for all head sizes made with firm elastic for comfortable wear without hurting the head.

Shri Adimulapu Suresh, Minister for Education, State of Andhra Pradesh and MP, appreciated the student's efforts in the Secretariat's premises. Aditya received high accolades from the guests present on his first successful invention. They also distributed face shields among state police officers, paramedics and other frontline workers deployed in the containment areas.

In conversation with P Mohan Aditya, he says, "With an increasing environmental degradation, we should move to the eco-friendly alternatives to develop products/services. Therefore, I thought to develop the face shields from reusable plastics and cardboard, which is easily degradable. He also corrugated, "After discovering a shortage in the supply of Personal Protective Equipment (PPE) globally, an idea struck my mind. Immediately I started researching on developing a piece of standard equipment to combat the Covid-19 pandemic. I am thankful Mr. Ravi, attorney of SRM-AP who supported me throughout the tough times by answering all doubts amidst challenging circumstances."

Aditya's invention turned out to be a successful project both for the University and the public. Leadership team of SRM University, AP – Dr P Sathyanarayanan, President, Prof V S Rao, Vice Chancellor, and Prof D Narayana Rao, Pro Vice Chancellor celebrated Aditya's rousing success by congratulating him on developing the face shield by making use of new technology.

Using the CAD software, Aditya designed the transparent visor of the face shield and manufactured the remaining headband using the CNC machine. The CAD model was used as the input to the CNC machine, Following the design, the CNC machine analysed and cut the cardboard and transparent sheet accordingly.

P Mohan Aditya's another innovative design on "building block for bed" was applied for copy right on 09-08-2020. The building block for bed is again an innovative work of making beds using reusable materials for COVID 19 patients. He and his team also successfully created an electric bicycle using a 24V 250Watt DC motor powered a 12V and 12Ah battery in the previous team assignment. Aditya desires to be a successful engineer and create such inventions for the betterment of society.