

पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 24/2023

ISSUE NO. 24/2023

शुक्रवार

FRIDAY

दिनांक: 16/06/2023

DATE: 16/06/2023

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : Automobile waste geopolymer concrete

<p>(51) International classification :B60R 110200, C04B 110000, C04B 112800, C04B 120000, C04B 280000</p> <p>(86) International Application No :PCT//</p> <p>Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA</p> <p>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA</p> <p>Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p>1)Paavai Engineering College (Autonomous) Address of Applicant :Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>2)Prof.K.Sharmiladevi, Paavai Engineering College (Autonomous)</p> <p>3)Mrs.S.Rajeswari, Paavai Engineering College (Autonomous)</p> <p>4)Mr.A.Jayapal, Paavai Engineering College (Autonomous)</p> <p>5)Mr.M.Rajkannan, Paavai Engineering College (Autonomous)</p> <p>6)Ms.S.Gayathri, Paavai Engineering College (Autonomous)</p> <p>7)Mrs.B.Kiruthika, Paavai Engineering College (Autonomous)</p> <p>8)Mrs.B.Karthiga, Paavai Engineering College (Autonomous)</p> <p>9)Mr.P. Kavinkumar, Paavai Engineering College (Autonomous)</p> <p>10)Mr.C.Manojprabu, Paavai Engineering College (Autonomous)</p> <p>11)Mr. M.Naveen Kumar, Paavai Engineering College (Autonomous)</p> <p>Name of Applicant : NA</p> <p>Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p>1)Paavai Engineering College (Autonomous) Address of Applicant :Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>2)Prof.K.Sharmiladevi, Paavai Engineering College (Autonomous) Address of Applicant :Associate Professor/HOD, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>3)Mrs.S.Rajeswari, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>4)Mr.A.Jayapal, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>5)Mr.M.Rajkannan, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>6)Ms.S.Gayathri, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>7)Mrs.B.Kiruthika, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>8)Mrs.B.Karthiga, Paavai Engineering College (Autonomous) Address of Applicant :Assistant Professor, Department of Civil Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>9)Mr.P. Kavinkumar, Paavai Engineering College (Autonomous) Address of Applicant :Second Year, PG Student, Department of Civil Engineering, M.E.- Structural Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>10)Mr.C.Manojprabu, Paavai Engineering College (Autonomous) Address of Applicant :Second Year, PG Student, Department of Civil Engineering, M.E.- Structural Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p> <p>11)Mr. M.Naveen Kumar, Paavai Engineering College (Autonomous) Address of Applicant :Second Year, PG Student, Department of Civil Engineering, M.E.- Structural Engineering, Paavai Engineering College (Autonomous), Paavai Nagar, Pachal, Namakkal, TamilNadu 637018 Namakkal -----</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(57) Abstract :

The primary purpose of this research was to develop a geopolymer concrete by utilizing fly ash as the sole component. This geopolymer concrete is intended to serve as a replacement for OPC concrete and is far less harmful to the environment. When this is done, the goal of lowering carbon emissions as well as the problem related with its disposal, which includes the environmental issues facing the region, can be accomplished. Even though a lot of work has been done on fly ash-based geopolymers, the fly ash that we find in India has a very distinct oxide content, and the fineness of the particles is also very different from the fly ashes that are found in other parts of the world. However, there has been no significant progress made in the creation of geopolymer concretes that are based on fly ash. This research aimed to (1) create an eco-friendly geopolymer concrete using fly ash and (2) investigate the effects of alkaline solution to binder ratio, potassium hydroxide concentration, and curing condition on fly ash and rubber tyre powder geopolymers. Ambient curing resulted. Discover how activator composition influences geopolymer concrete. This study examines how the alkaline solution-to-binder ratio influences new concrete workability. Water absorption, acid attack, sulfate attack, compressive strength, flexural strength, and splitting tensile strength must be tested. Finally, geopolymer concrete vs. ordinary concrete cost-benefit studies are underway.

No. of Pages : 12 No. of Claims : 4