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(54) Title of the invention : ENVIRONMENTAL IMPACT ON THE PERFORMANCE OF RECYCLED AGGREGATE CONCRETE

<p>(51) International classification :G01N0033380000, C04B0040000000, B28C0005000000, E04C0005070000, C04B0018160000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Mr. Mahavir Singh Rawat Address of Applicant :Assistant Professor, Department of Civil Engineering University Polytechnic IFTM University Moradabad Pin: 244102 State: Uttar Pradesh Country: India -----</p> <p>-----</p> <p>2)Mr. Rajbahadur 3)Mr. Neeraj Kumar 4)Mr. Ashish Simalti Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Mr. Mahavir Singh Rawat Address of Applicant :Assistant Professor, Department of Civil Engineering University Polytechnic IFTM University Moradabad Pin: 244102 State: Uttar Pradesh Country: India -----</p> <p>-</p> <p>2)Mr. Rajbahadur Address of Applicant :Assistant Professor, Department of Civil Engineering University Polytechnic IFTM University Moradabad Pin: 244102 State: Uttar Pradesh Country: India -----</p> <p>-</p> <p>3)Mr. Neeraj Kumar Address of Applicant :Assistant Professor, Department of Civil Engineering University Polytechnic IFTM University Moradabad Pin: 244102 State: Uttar Pradesh Country: India -----</p> <p>-</p> <p>4)Mr. Ashish Simalti Address of Applicant :Ph.D Scholar NIT Jalandhar Punjab Pin: 144011 State: Punjab Country: India -----</p>
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(57) Abstract :

Despite the fact that concrete is the most frequently used building material on the planet today, it produces a considerable quantity of CO₂. Despite the fact that concrete is the most often utilized construction material on a global scale nowadays. When RCA is utilized to generate RAC, the material's mechanical and environmental performance characteristics are thoroughly investigated. Three blends comprising recycled concrete aggregates were constructed, as well as a natural aggregate mix (RCA). It has been discovered that using RCA rather of conventional approaches reduces rubbish entering the environment by up to 30%. The Life Cycle Assessment technique has been used to undertake environmental studies (LCA). According to the findings, recycled concrete can cut carbon emissions in half when compared to new concrete, and the strength of the mortar that holds it together is highly dependent on its quality.

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