

(54) Title of the invention : NATURAL FIBERS COMPOSITES FOR CONSTRUCTION AND AUTOMOTIVE INDUSTRIES

(51) International classification :B29B 091400, B29K 111000, B29L 313000, C08J 050400, C08L 970200

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Sivasubramanian Palanisamy

Address of Applicant :Associate Professor, Department of Mechanical Engineering, Dilkap Research Institute of Engineering and Management Studies, Neral, Karjat-410101 Karjat -----

2)S.Palanisamy

3)Alias Paul

4)Dr. S. Anidha

5)Dr. M. Muthuk Kumar

6)Shankar Kadam

7)Dr. B. Vijaya Ramnath

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Sivasubramanian Palanisamy

Address of Applicant :Associate Professor, Department of Mechanical Engineering, Dilkap Research Institute of Engineering and Management Studies, Neral, Karjat-410101 Karjat -----

2)S.Palanisamy

Address of Applicant :Manager R&D, Nippon Paint India Pvt Ltd, Mambakkam Village, Sriperumbudur, Kancheepuram Dist-602106 Kancheepuram -----

3)Alias Paul

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Mar Baselios Institute of Technology and Science, Nellimattom, Kothamangalam, Kerala, 686693, India Kothamangalam -----

4)Dr. S. Anidha

Address of Applicant :Assistant Professor, Department of Chemistry, Trinity College for Women, Namakkal 637002 Namakkal -----

5)Dr. M. Muthuk Kumar

Address of Applicant :HoD, Department of Chemistry, Selvamm Arts and Science College (Autonomous), Namakkal 637003 Namakkal -----

6)Shankar Kadam

Address of Applicant :Assistant Professor, Mechanical Engineering Department, Bharati Vidyapeeths, College of Engineering, Lavale, Pune- 412115 Pune -----

7)Dr. B. Vijaya Ramnath

Address of Applicant :Professor and Head, Department of Mechanical Engineering, Sri Sai Ram Engineering College, Chennai - 600044, Tamil Nadu, India Chennai -----

(57) Abstract :

ABSTRACT NATURAL FIBERS COMPOSITES FOR CONSTRUCTION AND AUTOMOTIVE INDUSTRIES This invention focuses on natural fiber composites (NFCs) in which the matrix materials are polymeric resins. NFCs are composite materials comprising at least one major component derived from a biological origin. Fundamentals of NFC materials are discussed in terms of reinforcement performs, matrix resins, composite manufacturing techniques, characterization and quality assurance. Since NFC materials based on renewable resources can provide viable low-cost structural components and eco-friendly alternatives to conventional structural materials for automotive and construction applications, the newly emerging bio-based structural composite materials for construction and automotive industry applications are also considered.

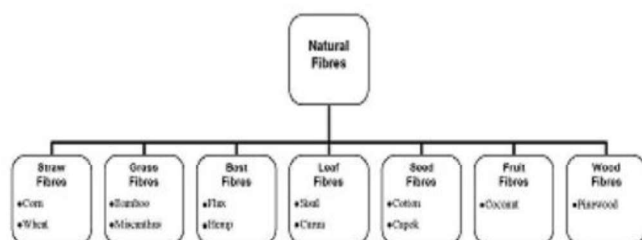


Fig.1: depicts the Natural Fiber classifications.