

(54) Title of the invention : CTS- INTELLIGENT MANUFACTURING PROCESS: COMPUTER INTELLIGENT MANUFACTURING PROCESS AND TESTING SYSTEM. (AID PHYSICAL THREE-DIMENSIONAL OBJECT)

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number Filing Date</p> <p>(62) Divisional to Application Number Filing Date</p>	<p>:G11C 29/04</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p>	<p>(71)Name of Applicant :</p> <p>1)Dr. N. GOVIND (ASSOCIATE PROFESSOR) Address of Applicant :DEPT. OF MECHANICAL ENGINEERING, RVR&JC COLLEGE OF ENGINEERING (A) CHOWDAVARAM, GUNTUR-522019, INDIA. Ph:9849467021, E-mail: govind.nandipati@gmail.com Andhra Pradesh India</p> <p>2)Dr. K. PRAVEEN KUMAR (ASSOCIATE PROFESSOR)</p> <p>3)Dr. RADHIKA SAJJA (ASSOCIATE PROFESSOR)</p> <p>4)D. SWAPNA (ASSISTANT PROFESSOR)</p> <p>5)K. LAKSHMI CHAITANYA (ASSISTANT PROFESSOR)</p> <p>6)M.VIJAYA (ASSISTANT PROFESSOR)</p> <p>7)MOHAMMAD HASHEER SHAIK (ASSISTANT PROFESSOR)</p> <p>8)KONDALA RAO DASARI (ASSISTANT PROFESSOR)</p> <p>9)KURRA HARI PRASAD (ASSISTANT PROFESSOR)</p> <p>10)T.N.S RAMA KRISHNA (ASSISTANT PROFESSOR)</p> <p>11)Dr. A. MUDDU (ASSISTANT PROFESSOR)</p> <p>(72)Name of Inventor :</p> <p>1)Dr. N. GOVIND (ASSOCIATE PROFESSOR)</p> <p>2)Dr. K. PRAVEEN KUMAR (ASSOCIATE PROFESSOR)</p> <p>3)Dr. RADHIKA SAJJA (ASSOCIATE PROFESSOR)</p> <p>4)D. SWAPNA (ASSISTANT PROFESSOR)</p> <p>5)K. LAKSHMI CHAITANYA (ASSISTANT PROFESSOR)</p> <p>6)M.VIJAYA (ASSISTANT PROFESSOR)</p> <p>7)MOHAMMAD HASHEER SHAIK (ASSISTANT PROFESSOR)</p> <p>8)KONDALA RAO DASARI (ASSISTANT PROFESSOR)</p> <p>9)KURRA HARI PRASAD (ASSISTANT PROFESSOR)</p> <p>10)T.N.S RAMA KRISHNA (ASSISTANT PROFESSOR)</p> <p>11)Dr. A. MUDDU (ASSISTANT PROFESSOR)</p>
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(57) Abstract :

ABSTRACT Our Invention CTS- Intelligent Manufacturing Process • is a computer automated manufacturing process and system is disclosed which includes a computer system which consists of a computer aided design computer and a machine controller which receives a file of coordinate information. The invented Technology also an article is designed by means of the computer aided design subsystem and a data file of three-dimensional coordinate information is compiled. The coordinate information is input to the machine controller which controls servos and in a polar coordinate system. The CTS- Intelligent Manufacturing Process to provide the servos and further control the position of a working head and working head so that mass particles are injected to arrive at predetermined coordinate points in the coordinate system to form an article. The invented Technology also an origination seed is fixed at an origin of the coordinate system and the article is built up around the origination seed. Other coordinate systems and apparatus for locating the mass particles at the coordinates of a three-dimensional article are disclosed so that the article may be built up in a number of coordinate systems, and controlled environments. The CTS- Intelligent Manufacturing Process a apparatus incorporating a movable dispensing head provided with a supply of material which solidifies at a predetermined temperature, and a base member, which are moved relative to each other along multiple axes in a predetermined pattern to create three-dimensional objects by building up material discharged from the dispensing head onto the base member at a controlled rate. The apparatus is preferably computer driven in a process utilizing computer aided design (CAD) and computer-aided (CAM) software to generate drive signals for controlled movement of the dispensing head and base member as material is being dispensed. The invented Technology also the three-dimensional objects may be produced by depositing repeated layers of solidifying material until the shape is formed and Any material, such as self-hardening waxes, thermoplastic resins, molten metals, two-part epoxies, foaming plastics, and glass, which adheres to the previous layer with an adequate bond upon solidification, may be utilized.

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