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APPLICANT NAME	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY (VNRVJIT)		
TITLE OF INVENTION	MOTORIZED ANKLE FOOT DRIVEN CUSTOMIZED PROSTHETIC LEG WITH EXOSKELETON		
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING		
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## (54) Title of the invention: MOTORIZED ANKLE FOOT DRIVEN CUSTOMIZED PROSTHETIC LEG WITH EXOSKELETON

<ul> <li>(51) International classification</li> <li>(31) Priority Document No</li> <li>(32) Priority Date</li> <li>(33) Name of priority country</li> <li>(86) International Application No Filing Date</li> <li>(87) International Publication No</li> <li>(61) Patent of Addition to Application Nun Filing Date</li> <li>(62) Divisional to Application Number Filing Date</li> </ul>	:NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant:  1)VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY (VNRVJIT)  Address of Applicant: Bachupally road Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad-500090, Telangana State, India Telangana India (72)Name of Inventor:  1)Dr.K.SUDHA RANI 2)Dr. R.MANJULA SRI 3)Dr.T.NIREEKSHANA 4)Dr. SHUCHI TIWARI 5)K.MANI KUMARI 6)Dr. N. SANDHYA 7)Dr. N. MANGATHAYARU 8)K.VIJAY CHANDRA 9)NAREGALKAR AKSHAY 10)Dr.A.GIRIPRASAD
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## (57) Abstract:

A prosthetic leg with 3D printing technology saves 70% of costs, incorporating innovative designs with high precision and low wastage. As the design is input from laser scanner, the measurements can be stored for further use and can be replicated. They can be transferred to the place of manufacturing and the patient can rest in his/her place. The device has detachable components such as an artificial leg and exoskeleton. This design can be utilized for people with multiple disabilities, people with amputated lower leg can use this as an artificial leg. The ankle exoskeleton can be utilized for people who survived after stroke, paralysis, and people whoever have weak limbs. People who have problem of lower limb amputation cum walking disability due to paralysis or stoke can be used as both artificial leg with ankle exoskeleton.

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