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(54) Title of the invention : Nano biocompatible hydrogels for treating external injuries

(51) International classification	:A61K0033380000, A61L0015460000, A61F0013020000, A61L0015280000, A61P0017020000	(71)Name of Applicant : 1)Dr.S.V.A.R.Sastry Address of Applicant :Associate Professor, Department of Chemical Engineering, MVGR College of Engineering (Autonomous), Vizianagaram, Andhra Pradesh, India. Pin-535005 Andhra Pradesh India 2)Dr.N. Giridhar Babu 3)Dr. N Vijay Kumar 4)Dr LNVH Soma Sundar 5)Dr. Susmitha Thota 6)Mr. Venkateswarlu Mannepally 7)Dr. J. Sai Chandra 8)Dr.Mahamuda Shaik 9)Dr. Kartik N. Shinde 10)Dr. B. RadhaKrishna 11)Mr. Nellore Manoj Kumar
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(57) Abstract :

The present disclosed invention relates to a hydrogel with enhanced sterilization product 5 comprising a biocompatible polymer and silver nanoparticles, and the hydrogel of the present invention has basic properties for use in wound treatment such as burns, i.e., body fluid absorption, ease of attachment to and detachment from wounds or skin, It has transparency, ease of handling and storability, and in particular, the effect of wound treatment is improved due to the toxin removal effect by silver (Ag) nanoparticles and the excellent sterilization effect 10 on viruses and various bacteria, so it is applied to wound treatment for skin regeneration treatment. It can be usefully used as a dressing.

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Form 5
The Patents Act, 1970
(39 Of 1970)
&
The Patent Rules, 2005
Declaration as to Inventorship
[See section 10(6) and rule 13(6)]

1.NAME OF THE APPLICANT(s)	<p>We, Dr.S.V.A.R.Sastry et. al., all are citizen of India, Address of first Applicant: Associate Professor, Department of Chemical Engineering, MVGR College of Engineering (Autonomous), Vizianagaram, Andhra Pradesh, India. Pin-535005, hereby declare that the true and first inventor(s) of the invention disclosed in the specification filed in pursuance of our application numbered TEMP/E-1/40391/2021-CHE dated 09.08.2021 are:</p>
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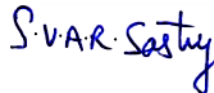
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Dated this 09th August 2021.


Signature:
Applicant(s)
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~~3. DECLARATION TO BE GIVEN WHEN THE APPLICATION IN INDIA IS FILED BY THE APPLICANT(S) IN THE CONVENTION COUNTRY:~~

~~We the applicant(s) in the convention country hereby declare that our right to apply for a patent in India is by the way of assignment from the true and the first inventor(s).~~

To,
The Controller of Patent
The Patent Office,
At CHENNAI.