(21) Application No.201911020092 A

(19) INDIA

(22) Date of filing of Application :21/05/2019

(43) Publication Date: 20/08/2021

## $(54) \ Title \ of the invention: DEVELOPMENT \ OF \ PHYTOSYNTHETIC \ ZINC \ OXIDE \ NANOPARTICLES \ AS \ AQYEOUS \ BASED \ ANTI-DANDRUFF \ AGENT$

(51) International classification (31) Priority Document No (32) Priority Date	A61K0008490000, A61K0008270000,	(71)Name of Applicant: 1)AMITY UNIVERSITY Address of Applicant: E-27 DEFENCE COLONY NEW DELHI-110024, INDIA Delhi India (72)Name of Inventor: 1)ANURAG JYOTI 2)RAJESH SINGH TOMAR
(33) Name of priority country (86) International Application No Filing Date (87) International Publication No	:NA :NA :NA : NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

## (57) Abstract

The present invention relates to synthesis of Zinc Oxide nanoparticles (ZnO-NPs) with natural surfactants using green approach, which are less toxic. Natural microenvironment with proper distribution of bacterial (Propionibacterium and Staphylococcus) and fungal (Malassezia) pathogens to mimic the dandruff condition is created. Phytosynthetic ZnO-NPs are used as aqueous based anti-dandruff agent against created microenvironment.

No. of Pages: 14 No. of Claims: 2