(19) INDIA

(51) International

(86) International

Filing Date (87) International

(61) Patent of Addition

to Application Number

Filing Date

Application Number

Filing Date

(62) Divisional to

Application No

Publication No

classification

(22) Date of filing of Application :22/08/2023

:A61K0009000000, A61K0009700000,

A61P0031100000, A61K0047100000,

A61P0025080000

:NA

:NA

: NA

 $\cdot NA$

:NA

:NA

:NA

(43) Publication Date: 13/10/2023

(54) Title of the invention : DEEP EUTECTIC SOLVENT-BASED ANTI-FUNGAL MUCO-ADHESIVE GEL FOR TRANSDERMAL DRUG DELIVERY.

(71)Name of Applicant :1)Dr. Pankaj V. Dangre

Address of Applicant :HOD, Department of Pharmaceutics, Datta Meghe College of Pharmacy, Datta Meghe Institute of Higher Education and Research, Deemed to Be University, Wardha -------

2)Ms. Amruta V. Shelar Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. Pankaj V. Dangre

Address of Applicant: HOD, Department of Pharmaceutics, Datta Meghe College of Pharmacy, Datta Meghe Institute of Higher Education and Research, Deemed to Be University, Wardha ------

2)Ms. Amruta V. Shelar

Address of Applicant :Chemical & Biotechnology Board, Department of Technology, Savitribai Phule Pune University, Pune Pune -----

3)Mr. Kunal S. Kotkar

Address of Applicant: Department of Pharmaceutical Quality Assurance & Industrial Pharmacy, R C Patel Institute of Pharmaceutical Education and Research, Karwand Naka, Shirpur-425405 ------

4)Dr. Shailesh S. Chalikwar

Address of Applicant :Professor & HOD Department of Pharmaceutical Quality Assurance & Industrial Pharmacy, R C Patel Institute of Pharmaceutical Education and Research, Karwand Naka, Shirpur-425405 Dhule ------

5)Dr. Maheshkumar R. Borkar

Address of Applicant :Asst. Professor, Pharmaceutical Chemistry, Dr. Bhanuben Nanavati College of Pharmacy, Gate No.1, 1st Floor, Mithibai College Campus, V.M.Road, Vile Parle (West), Mumbai-400056, Maharashtra, India. Mumbai -------

6)Mr. Satish S Meshram

Address of Applicant :Department of Pharmacognosy, University Department of Pharmaceutical Science, Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur-440033, Nagpur -------

(57) Abstract:

ABSTRACT Deep eutectic solvent-based Anti-fungal muco-adhesive gel for transdermal drug delivery. The present invention aims to create a deep eutectic solvent for topical drug formulation to increase solubility and penetration of active pharmaceutical drugs. The formulation includes active pharmaceutical ingredients, hydrogen bond acceptors, hydrogen bond donors, polymers, humectants, surfactants, preservatives, and pH adjusting agents. The active pharmaceutical ingredient is an anti-fungal drug for the treatment of fungal infections.

No. of Pages: 52 No. of Claims: 19