

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 51/2024
ISSUE NO. 51/2024

शुक्रवार
FRIDAY

दिनांक: 20/12/2024
DATE: 20/12/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : DEVELOPMENT OF OPTIMIZED DRUG DELIVERY SYSTEM OF ANTIDEPRESSANT DRUG FLUOXENTINE HYDROCHLORIDE

(51) International classification :A61K0009200000, A61K0009000000, A61P0025000000, A61P0025160000, A61K0009060000

(86) International Application No :NA
 Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
 Filing Date :NA

(62) Divisional to Application Number :NA
 Filing Date :NA

(71)Name of Applicant :
1)IFTM University
 Address of Applicant :Lodhipur Rajpoot, Delhi Road, Moradabad - 244102 ----

2)Dr. Vijay Sharma
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)Dr. Vijay Sharma
 Address of Applicant :Pharmacy Academy, IFTM University, Moradabad - 244102 Moradabad -----

2)Dr Amit Kumar
 Address of Applicant :Institute of pharmacy , Shri Ram Swaroop Memorial University, Lucknow - 225003 Lucknow -----

3)Mr. Maneesh Kumar Singh
 Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research. Modinagar, Ghaziabad -201204 Modinagar -----

4)Mr. Saurabh Singh
 Address of Applicant :Dayanand Dinanath College, Institute of Pharmacy, Kanpur Nagar-209214 Kanpur -----

5)Mr. Pramod chauhan
 Address of Applicant :Institute of pharmacy SRM University – Lucknow- 225003 Lucknow -----

6)Sumit Kumar
 Address of Applicant :Veer madho Singh Bhandari Uttrakhand Technical University Sudhowala, Dehradun -248007 Dehradun -----

7)Mr. Raghendra Kumar Yadav
 Address of Applicant :Institute of pharmacy SRM University – Lucknow- 225003 Lucknow -----

8)Mr. Ravi Kumar Gautam
 Address of Applicant :Faculty of pharmacy University, Future University City – Bareilly- 243001 Bareilly -----

9)Mr. Tribhuwan Kumar Vashishtha
 Address of Applicant :Pharmacy Academy, IFTM University, Moradabad - 244102 Moradabad -----

10)Dr. Alankar shrivastav
 Address of Applicant :Pharmacy Academy, IFTM University, Moradabad - 244102 Moradabad -----

11)Dr. Pawan Singh
 Address of Applicant :Pharmacy Academy, IFTM University, Moradabad - 244102 Moradabad -----

12)Dr. Navneet Verma
 Address of Applicant :Pharmacy Academy, IFTM University, Moradabad - 244102 Moradabad -----

(57) Abstract :
 The present invention relates to a development of optimized drug delivery system of antidepressant drug fluoxetine hydrochloride. The formulation employs a face-centered central composite design (CCD) to optimize the concentrations of sodium starch glycolate as a super-disintegrant and camphor as a sublimating agent. The FDTs were produced using a direct compression method, resulting in tablets that exhibit rapid disintegration and dissolution. Optimized batches demonstrated a wetting time of approximately 18.08 seconds, a disintegration time of 19.84 seconds, and a drug release rate of 85.82% within five minutes. Stability studies conducted under accelerated conditions confirmed no significant changes in the optimized tablets over 30 days. This formulation offers enhanced patient compliance through rapid onset of action, low dosing, and ease of administration without the need for water

No. of Pages : 10 No. of Claims : 7