

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 33/2025
ISSUE NO. 33/2025

शुक्रवार
FRIDAY

दिनांक: 15/08/2025
DATE: 15/08/2025

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : DESIGN AND CHARACTERIZATION OF ORALLY DISINTEGRATING TABLETS OF CEFIXIME

<p>(51) International classification :A61K31/545, A61K47/38, A61K9/20, A61K9/22, A61K47/26, A61K47/14, A61K47/12, A61K31/79</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Dr Vijay Sharma Address of Applicant :Faculty of Pharmacy, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>2)Dr. Navneet Verma 3)Maneesh Kumar Singh 4)Siddharth Dhaka 5)Bhavana Singh 6)Hari Om 7)Vineeta Rawat 8)Neha Kumari 9)Sakshi Dagar 10)Ankur Gupta 11)Kanojija Pankajkumar Santram 12)Mhaveer Singh Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr Vijay Sharma Address of Applicant :Faculty of Pharmacy, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>2)Dr. Navneet Verma Address of Applicant :Pharmacy Academy, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>3)Maneesh Kumar Singh Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>4)Siddharth Dhaka Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>5)Bhavana Singh Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>6)Hari Om Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>7)Vineeta Rawat Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>8)Neha Kumari Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>9)Sakshi Dagar Address of Applicant :Dr K N Modi Institute of Pharmaceutical Education and Research, Modinagar, Ghaziabad, Uttar Pradesh, Pin Code: 201204 -----</p> <p>10)Ankur Gupta Address of Applicant :Gyan Vihar School of Pharmacy, Suresh Gyan Vihar University, Jaipur, Rajasthan, Pin Code: 302017 -----</p> <p>11)Kanojija Pankajkumar Santram Address of Applicant :J K Institute of Pharmacy and Management, Khurja, Bulandshahr, Uttar Pradesh, Pin Code: 203131 -----</p> <p>12)Mhaveer Singh Address of Applicant :Faculty of Pharmacy, IFTM University, Moradabad , Uttar Pradesh, Pin Code: 244102 -----</p>
--	---

(57) Abstract :

The Present invention relates to the development of mouth-dissolving tablets (MDTs) of Cefixime using superdisintegrants for enhanced patient compliance, particularly among pediatric and geriatric populations. Cefixime, a third-generation cephalosporin antibiotic, suffers from poor palatability and swallowing difficulties in its conventional tablet form. The invention involves direct compression method using different concentrations of superdisintegrants such as sodium starch glycolate (SSG), crospovidone, croscarmellose sodium (CCS), and polacrifin potassium to formulate MDTs that rapidly disintegrate in the oral cavity without the need for water. Evaluation studies including disintegration time, friability, wetting time, and dissolution profiling confirmed the superior performance of crospovidone at 7.5% concentration (batch MDT5), which demonstrated a disintegration time of 30 ± 2.4 seconds and desirable tablet properties. This approach improves patient compliance and enables faster therapeutic onset, making it ideal for acute infections where rapid antibiotic action is required.

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