

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 09/2025
ISSUE NO. 09/2025

शुक्रवार
FRIDAY

दिनांक: 28/02/2025
DATE: 28/02/2025

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(PROF. (DR) UNNAT P. PANDIT)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

28th February, 2025

(54) Title of the invention : SMART BANDAGE WITH INTEGRATED BIOSENSORS AND DRUG DELIVERY SYSTEM

(51) International classification :A61F13/00, A61M35/00, G16H20/10,
A61L15/44, A61K9/70, A61B5/00

(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)Swami Rama Himalayan University
 Address of Applicant :Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand, 248016, India -----
Name of Applicant : NA
Address of Applicant : NA

(72)**Name of Inventor :**
1)Hridayesh Srivastava
 Address of Applicant :Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand, 248016, India -----
2)Dr. Suman Pant
 Address of Applicant :Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand, 248016, India -----
3)Sneha Saxena
 Address of Applicant :Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand, 248016, India -----
4)Vaibhav Uniyal
 Address of Applicant :Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand, 248016, India -----

(57) Abstract :
 The present invention provides a smart bandage with integrated biosensors and drug delivery system. The bandage includes an outermost layer as a breathable, waterproof membrane that guards the wound from external contaminants while allowing for ideal gas exchange. Underneath this are tiny biosensors, each smaller than a grain of sand that can keep track of different wound conditions all the time. These biosensors send live data to a smart microprocessor built into the patch. This microprocessor looks at incoming data and checks it against large databases of wound healing trends to help decide on treatment plans. The smart bandage's drug delivery system has been turned on, according to the AI's research. This system has several small storage areas that hold different types of medicine, like medicines, growth factors, and pain relief drugs.

No. of Pages : 28 No. of Claims : 9