

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202541133175 A

(19) INDIA

(22) Date of filing of Application :29/12/2025

(43) Publication Date : 09/01/2026

(54) Title of the invention : AN INTEGRATED MULTI-TOOLED RESTORATIVE DENTAL INSTRUMENT SYSTEM.

(51) International classification	:G06F 111/14, G16H 70/60, G16Y 20/10, A61M 60/40, A61M 60/50	(71)Name of Applicant : <b>1)JSS DENTAL COLLEGE &amp; HOSPITAL – JSS ACADEMY OF HIGHER EDUCATION &amp; RESEARCH</b> Address of Applicant :8MV2 + 6WQ, Bangalore – Mysore Road, Sri Shivarathreshwara Nagar, Bannimantap, Mysuru, Karnataka – 570015, India.
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(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:	
Filing Date	:01/01/1900	
(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	

(57) Abstract :

The present invention relates to a multi-tooled restorative dental instrument system, designed to integrate multiple essential restorative dental tools into a single compact, ergonomic handheld device. The system comprises a hexagonal stainless-steel handle housing a plurality of restorative instruments—including an explorer, plastic filling instrument, condenser, ball burnisher, spoon excavator, and carver—each mounted on an individual pivot mechanism that enables selective fold-out deployment and secure locking during use. When retracted, all tools reside fully within the handle, ensuring compactness, safety, and protection from contamination or damage. The invention eliminates the need for multiple standalone instruments, reduces clinical interruptions, enhances portability and sterilization efficiency, and improves ergonomic control during restorative procedures. Optional embodiments include interchangeable modular heads for pediatric, periodontal, or specialty applications. The invention provides a novel, efficient, and field-ready multi-instrument solution for restorative dentistry.

No. of Pages : 17 No. of Claims : 10