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(54) Title of the invention : A MODULAR DENTAL INSTRUMENTAL DEVICE FOR STERILIZATION AND A METHOD OF OPERATION THEREOF

(51) International classification	:A61L 2/10, A61C 19/00, A61C 1/00, A61C 19/02, A61C 1/08	(71)Name of Applicant : <b>1)JSS Dental College &amp; Hospital, JSS Academy of Higher Education and Research</b> Address of Applicant :Namitha Rao C3, Emperor Vihar, Ganesh Temple Road, Behind Jal Vayu Vihar, Kammanahalli, Bangalore, Karnataka-560043 Mysore Karnataka India
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(57) Abstract :

A modular dental instrumental device (100) for sterilization and a method of operation is provided. The device (100) includes an ultraviolet (UV) sterilization chamber (102) including an ultraviolet-C (UV-C) light-emitting diode (LED) strip (108) and a transparent UV-grade poly (methyl methacrylate) (PMMA) lid (110), connected to a circular rotating base (106) for preventing UV leakage. The device further includes an interchangeable instrument handle (104) connected to a plurality of dental instrumental tips, placed on a tool slot (116) mounted inside the UV sterilization chamber (102) for sterilization of the dental instruments. The device (100) further includes a circular rotating base (106) connected to the UV sterilization chamber (102) for ensuring the even exposure of the dental instruments placed inside the UV sterilization chamber (102) to UV light. The modular dental instrumental device 100 also includes a power source 112, a solar panel 114, a tool slot 116, and a power base 118. [FIG. 1A]

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