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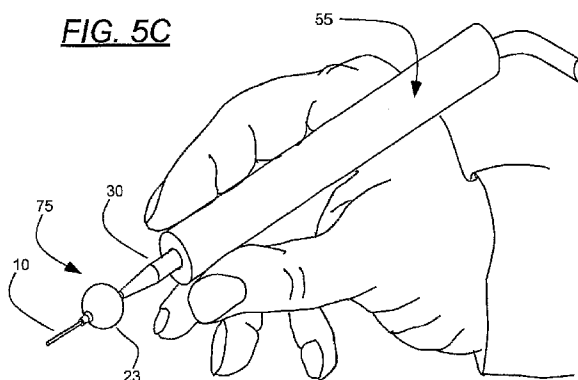
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(54) Title: SELF-CONTAINED DISPOSABLE MICRO-ABRASIVE BLASTING TIP FOR DENTAL APPLICATIONS AND METHOD

FIG. 5C



(57) Abstract: The present invention is a micro-abrasive blasting device (75) constructed from a disposable pipette structure (80) comprising a delivery conduit (30) extending from a delivery conduit inlet (35) through a tapered section (33) to form a delivery conduit outlet (37) and an inlet port (27); contiguous pipette structure (80) expands from inlet port (27) to form a hollow bulb mixing chamber (23) and then narrows to form a discharge port (29) section; a discharge conduit (10) is in fluid communications with discharge port (29) and extends from a discharge conduit inlet (12) internal to mixing chamber (23) to a discharge conduit outlet (14) external to mixing chamber (23); a particulate matter (50) is disposed within mixing chamber wall (25); discharge conduit inlet (12) abuts inlet port (27) preventing particulate matter (50) from exiting mixing chamber 23. A separation gap (45) between the delivery conduit outlet (37) and discharge conduit inlet (12) is created so discharge conduit inlet (12) no longer abuts inlet port (27); As pressurized-gas is supplied to micro-abrasive blasting device (75) through the delivery conduit inlet (35), the pressurized-gas flows through the delivery conduit (30) and out of the inlet port (27), into mixing chamber (23). As flow is initiated, particulate matter (50) instantaneously mixes with the gas-steam within hollow resilient bulb mixing chamber (23) and the powder-gas mixture flows through discharge conduit (10) to strike target surface (40).

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER IPC: B24C 5/04(2006.01) USPC: 451/90 According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 451/90, 102, 101, 99, 38 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X --- Y	US 6,439,966 A (Bruns et al) 27 August 2002 (27.08.2002) (See entire document)	1-2, 6 ----- 7										
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