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(71) Applicant: **MICRON TECHNOLOGY, INC.** [US/US];
P.O. BOX 6, 8000 South Federal Way, Boise, ID 83706-
9632 (US).

(72) Inventors: **MOORE, Scott E.**; 1840 E. Mary Lane,
Meridian, ID 83642 (US). **LEE, Whonchee**; 8998 S.
Raptor Lane, Boise, ID 83709 (US). **MEIKLE, Scott**

G.; 14433 Clubhouse Road, Gainesville, VA 20155 (US).
DOAN, Trung T.; 1574 Shenandoah Drive, Boise, ID
83712 (US).

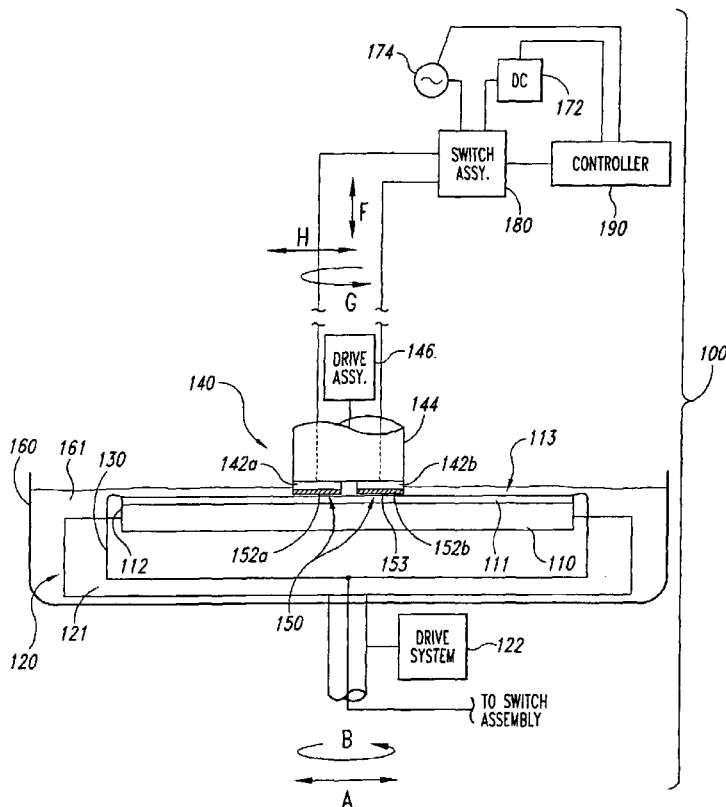
(74) Agents: **PARKER, Paul T.** et al.; Perkins Coie LLP, P.O.
Box 1247, Seattle, WA 98111-1247 (US).

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(54) Title: METHODS AND APPARATUS FOR ELECTROCHEMICAL-MECHANICAL PROCESSING OF MICROELEC-
TRONIC WORKPIECES



(57) Abstract: Methods and apparatuses for electrochemical-mechanical processing of microelectronic workpieces. One embodiment of an electrochemical processing apparatus (100) in accordance with the invention comprises a workpiece holder (120) configured to receive a microelectronic workpiece (110), a workpiece electrode (130), a first remote electrode (142a), and a second remote electrode (142b). The workpiece electrode (142) is configured to contact a processing side (113) of the workpiece (110) when the workpiece is received in the workpiece holder (120). The first and second remote electrodes (142) are spaced apart from the workpiece holder (120). The apparatus (100) can also include an AC power supply (174), a DC power supply (172), and a switching assembly (180). The switching assembly (180) is coupled to the workpiece electrode (130), the first remote electrode (142a), the second remote electrode (142b), the AC power supply (174), and the DC power supply (172). In operation, the switching assembly (180) couples the AC power supply (174) and/or the DC power supply (172) to the workpiece electrode (130), the first remote electrode (142a), and/or the second remote electrode (142b) for plating, deplating and/or mechanically removing material.

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