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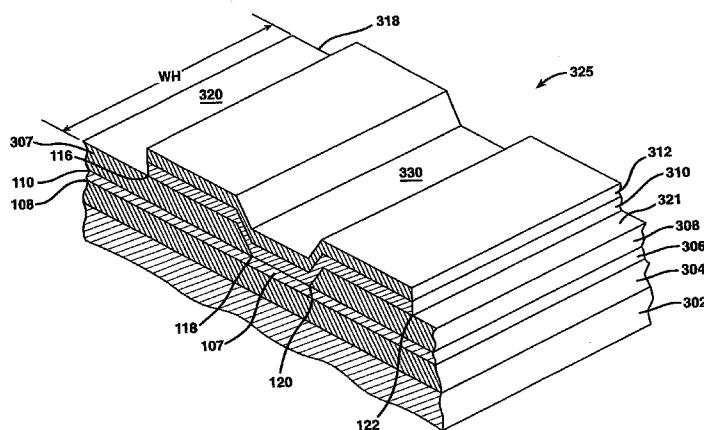
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- (71) Applicant: LEXMARK INTERNATIONAL, INC. [US/US]; 740 New Circle Road, Lexington, KY 40550 (US).
- (72) Inventors: ANDERSON, Frank, E.; 700 Davis-Turkey Foot Road, Lexington, NY 40370 (US). BELL, Byron, V.; 741 Collins Road, Paris, KY 40361 (US). CORNELL, Robert; 4173 Palmetto Drive, Lexington, KY 40513 (US). GUAN, Yimin; 1108 Rolfe Lane, Lexington, KY 40513 (US). PARISH, George, Keith; 11 Fontaine, Winchester, KY 40391 (US).
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(54) Title: HEATER CHIP WITH DOPED DIAMOND-LIKE CARBON LAYER AND OVERLYING CAVITATION LAYER



(57) Abstract: An inkjet printhead heater chip has a silicon substrate with a heater stack formed of a plurality of thin film layers thereon for ejecting an ink drop during use. The thin film layers include: a thermal barrier layer on the silicon substrate; a resistor layer on the thermal barrier layer; a doped diamond-like carbon layer on the resistor layer; and a cavitation layer on the doped diamond-like carbon layer. The doped diamond-like carbon layer preferably includes silicon but may also include nitrogen, titanium, tantalum, combinations thereof or other. When it includes silicon, a preferred silicon concentration ranges from 20 to 25 atomic percent. A preferred cavitation layer includes an undoped diamond-like carbon, tantalum or titanium layer. The doped diamond-like carbon layer ranges in thickness from 500 to 3000 angstroms. The cavitation layer ranges from 500 to 6000 angstroms. Inkjet printheads and printers are also disclosed.



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