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(71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk 10504 (US).

(71) Applicants *(for LU only)*: **IBM DEUTSCHLAND GMBH** [DE/DE]; Pascalstrasse 100, 70569 Stuttgart (DE). **INFINEON TECHNOLOGIES AG** [DE/DE]; St. Martin-Str. 53, 81669 München (DE).

(72) Inventors: **CLEVENGER, Larry**; 90 Andrews Road, LaGrangeville 12540 (US). **DALTON, Timothy**; 72 Sarah Bishop Road, Ridgefield 06877 (US). **HOINKIS, Mark**; 37 Spruce Ridge Drive, Fishkill 12524 (US). **KALDOR, Steffen**; 3 Chadwick Court, Fishkill 12524 (US). **KUMAR, Kaushik**; 1F South Lockey Woods Road, Beacon 12508 (US). **LA TULIPE, Douglas, Jr.**; 32 S.King Street, Danbury 06811 (US). **SEO, Soon-Cheon**; 19C Hillside Terrace, White Plains 10601 (US). **SIMON, Andrew**; 269 Crestwood Court, Fishkill 12524 (US). **WANG, Yun-Yu**; 34 Cypher Lane, Poughquag 12570 (US). **YANG, Chih-Chao**; 60 N. Lockey Woods Road, Apt. F, Beacon 12508 (US). **YANG, Haining**; 36 Robinson Lane, Wappingers Falls 12590 (US).

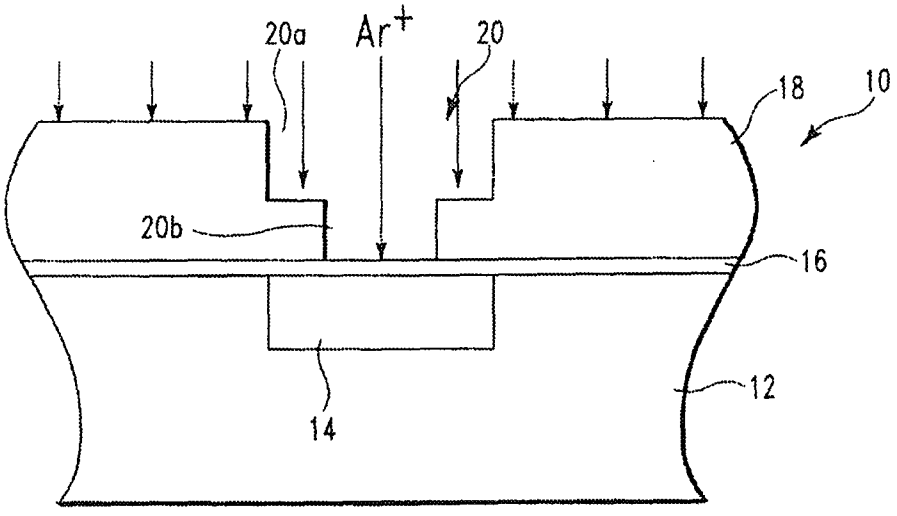
(74) Agent: **TEUFEL, Fritz**; IBM Informations Systeme GmbH, Postal Code, 70548 Stuttgart (DE).

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(54) Title: A METHOD FOR DEPOSITING A METAL LAYER ON A SEMICONDUCTOR INTERCONNECT STRUCTURE HAVING A CAPPING LAYER



(57) Abstract: Disclosed is a method for depositing a metal layer on an interconnect structure for a semiconductor wafer. In the method, a metal conductor (14) is covered by a capping layer (16) and a dielectric layer (18). The dielectric layer is patterned so as to expose the capping layer. The capping layer is then sputter etched to remove the capping layer and expose the metal conductor (14). In the process of sputter etching, the capping layer is redeposited (22) onto the sidewall of the pattern. Lastly, at least one layer is deposited into the pattern and covers the redeposited capping layer.

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