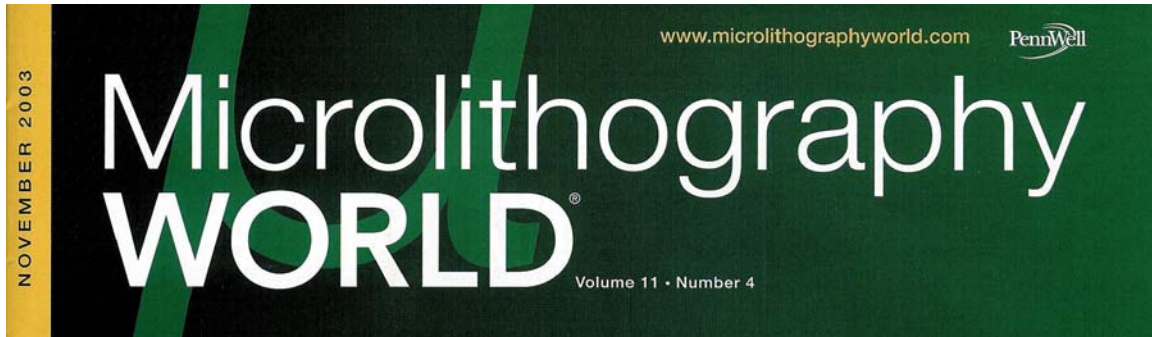


Intelligent Micro Patterning, LLC in the News Microlithography World



NEWS & PRODUCTS

process development. He also noted problems with mask defects and contamination, and concern about tool reliability for actual mass production.

The appeal of the tool, if the company and the consortium it has recruited can really get the technology to work, is that it is inexpensive. The e-beam stepper will cost about \$8 million — and a mask may be in the \$8000 to \$17,000 range, compared to up to \$65,000 for a 193nm mask.

— Paula Doe, European Editor

Cymer appoints Yen senior VP, Hudyma joins board

Cymer Inc., San Diego, CA, has appointed industry veteran Anthony (Tony) Yen as senior VP of lithography market development. Yen previously served as codirector of the Lithography Division at International SEMATECH (ISMT), where he was responsible for formulating and executing ISMT's lithography strategy to take semiconductor technology down to the 32nm node. Prior

Intelligent Micro provides rapid prototyping

Intelligent Micro Patterning System Solutions LLC, St. Petersburg, FL, now offers rapid prototyping of micro devices using polydimethylsilane (PDMS) for micromolding. PDMS has been used to fabricate biological micro devices for medical diagnostics, environmental testing, and bioterrorism defense because of its optical transparency, compatibility with various biological materials, and moldability. Intelligent Micro Patterning uses patented Smart Filter technology for maskless photolithography, developed by and licensed from the U. of South Florida, that incorporates micro-optical techniques to project master images directly onto substrates such as quartz, metals, and polymers, without photomasking. Smart Filter has applications in advanced packaging, optoelectronics, fiberoptic communications and DWDM systems, multichip modules, and MEMS. www.intelligentmp.com

for conventional pre-diffusion cleaning and advanced FEOL cleaning; both setups are compliant with SECS/GEM factory automation. www.akrion.com

Ellipsometry system

The *ultra-II* Focused-Beam ellipsometry system's enhanced DUV reflectometer with photomultiplier detector enables more accurate and reproducible results at the 90 and 65nm processing nodes. A new optional wafer-bow/film-stress module enables fully automated, single-pass measurements of film thickness and stress using a laser beam broken into multiple parallel beams; the system measures the relative spacing of the reflected beams to measure the curvature of the wafer. The system is less sensitive to vibration and other errors than simple beam deflection and height measurements, so it provides greater sensitivity for measuring various materials, including low-*k* and ultralow-*k* dielectrics, SiGe, and strained silicon. www.rudolphtech.com