

Canon Marketing Japan acquires exclusive sales right of Obducat's Nano Imprint Lithography Equipment

Canon Marketing Japan (President : Haruo Murase) is pleased to announce that it has signed an exclusive distribution agreement with Obducat (CEO : Patrik Lundstrom). The agreement gives CMJ the exclusive rights to sell Obducat's Nano Imprint Lithography equipment in Japan. Canon Marketing Japan will start marketing the equipment from March 1st, 2007 and enter into the new marketplace of nanoimprint equipment.

NIL equipments, by pressing stampers to resist coated on substrates, enable transferring small feature pattern to optical components etc in the nanometer range and realize cost efficient pattern replication compared to existing photolithography equipments.

Nowadays, in line with the miniaturization and multifunctional capability of optical components such as polarizing elements, microlens arrays and LEDs or the density growth in storage devices such as magnetic or optical disks, needs for creating fine patterns to all kinds of substrates is growing. CMJ, having been marketing various equipments, including semiconductor-manufacturing equipments, LCD panel manufacturing equipments and measurement equipments, to the leading-edge industry, will further expand its business in the Industrial area with the new release of the nanoimprint equipment.

Obducat' NIL equipment, utilizes Obducat's proprietary "SoftPressTM" technology, which enables air pressure to be evenly distributed, ensuring a uniform and thin pattern over substrates. In addition, Obducat's "STUTM (Simultaneous Thermal and UVTM)" technology enables simultaneously combined UV and thermal NIL, allowing precise imprint to substrates. The patented "IPS (Intermediate Polymer Stamp)" imprint process enables contamination control and increases the stamp lifetime through a two-step process where the contact between the master stamp and the hard substrate is avoided. Instead a process with a soft intermediate stamp is used to transfer the pattern from the master to the substrate.

[key benefit]

- Soft Press TM technology : Full area uniform imprint
- STUTM (Simultaneous Thermal and UVTM) technology : Precise pattern transfer
- IPSTM (Intermediate Polymer StampTM) technology : Yield improvement

Product Name	Price	Release	Sales Plan
Obducat's Nano Imprint Lithography equipment "Sindre" for mass production * 1	JPY500,000,000 ~	March 1st , 2007	10 units / year

Obducat's Nano Imprint Lithography equipment for R&D *2	JPY25,000,000 ~ JPY150,000,000		
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*1 :Wafer sizes up to 8-inch

*2: Wafer sizes (2.5 – 8 inch)

[Product portfolio]

1. Soft Press Technology™ Full area uniform imprint

Realizes uniform imprint by pressing stampers against substrates with air pressure. The use of Soft Press™ ensures parallelism between stamp and substrate, resulting in a thin and uniform residual layer at better than +/- 10 nm and is independent of substrate size shape and waviness.

2. STU™ - Simultaneous Thermal and UV™ Precise pattern transfer

Obducat's proprietary STU™ technology enables simultaneously combined UV and thermal NIL, allowing imprint to UV-curable thermoplastic pre-polymers at a constant temperature. The method has been developed in order to overcome problems generating from the difference in thermal expansions between stamps and substrates. The method allows the use of spin-coated UV-curable polymers with a homogeneous thickness distribution on wafer scale, crucial for CD control and enabling pattern transfer to an underlying substrate.

3. IPS™ - Intermediate Polymer Stamp™ Yield improvement

This IPS™ technology was developed to solve the several concerns pointed out in the method which stampers directly touch substrates. The IPS™ technology enables contamination control, increases the stamp lifetime and avoids breakage, through a two-step process where the contact between the master stamp and the hard substrate is avoided. Instead a process with a soft intermediate stamp is used to transfer the pattern from the master to the substrate.

4. Auto transfer capabilities of substrate and stamper

Imprint under clean environment

Respective pod stages for both substrates and stamps enable to correspond to mini environment method. By using the private robot for auto transfer, risk of breakage during transportation and the contamination risk are alleviated. By equipping ULPA filter within the system, the transportation area of the substrates and stampers can be maintained at a class 10 level clean environment. Controlling contamination with the IPS™ technology and the pod function ensures improving yield.

For further information, please contact:

<CMJ INFO>

Internet :

<[Canon Homepage](#) INFO>

[key specification]

Imprint method	<input type="checkbox"/> STU/thermal/UV, whole area imprint
Substrate	<input type="checkbox"/> Max 8inch
Throughput	<input type="checkbox"/> 30 subs/hour Max 90subs/hour)
Footprint	<input type="checkbox"/> 4 <input type="checkbox"/>
Handling	<input type="checkbox"/> Automatic by robot
Mini-environment	<input type="checkbox"/> Class 10

[ObducatAB]

Company name	<input type="checkbox"/> Obducat AB
Headquarter	<input type="checkbox"/> Geijersgatan 2A, 216 18, Malmo, Sweden
CEO	<input type="checkbox"/> Patrik Lundstrom
Found	<input type="checkbox"/> 1989
Employee	<input type="checkbox"/> 52
Business	<input type="checkbox"/> Design, production, sales and servicing of nano-imprint equipment and EBR.
Product portfolio	<input type="checkbox"/> Nano-imprint equipment, EBR
URL	<input type="checkbox"/> http://www.obducat.com/