

May 20, 2019
Public Relations and Investor Relations Department
Corporate Governance Division
Oji Holdings Corporation
https://www.ojiholdings.co.jp/english

Achieves high-precision pattern formation on Transparent Cellulose Nano-fiber Sheet

Oji Holdings Corporation ("Oji", Director of the Board/President: Masatoshi Kaku, Head Office: Tokyo) and Ushio Inc. ("Ushio", CEO: Koji Naito, Head Office: Tokyo) have succeeded in high-precision patterning (Line and Space: L/S=10/10µm) on the Transparent Cellulose Nano-fiber (CNF) Sheet called "AUROVEIL" by using Ushio's light source unit for printable patterning VUV aligner (*1).

We will exhibit the patterned AUROVEIL sample in "FLEX Japan 2019" at the Grand Hall (Shinagawa, Tokyo) from May 22nd (Wed) to 23rd (Thu).

It can be expected to provide a smaller and lower power consumption circuit than usual, using this technology. We aim to apply "AUROVEIL" as the new high-precision pattering substrate for disposable devices such as wearable sensor devices, RFID tags and so on for achieving an IoT society by utilizing flexibility and sustainability characteristics of CNF.

Oji's Transparent CNF sheet, "AUROVEIL" has excellent flexibility, high level of transparency equivalent to glass, and higher tensile strength and lower coefficient of thermal expansion than plastic films. Since AUROVEIL also has highly hydrophilic nature, it is highly compatible with the adopted hydrophilizing pattering method, which resulted in this achievement.

Sample Image: for a wearable sensor device>



(*1) [Printable Patterning \(\bar{VUV} - \text{Aligner J} \)

Ushio Inc. HomePage: https://www.ushio.co.jp/en/products/1005.html

Contact

CNF R&D Center, Innovation Promotion Division, Oji Holdings Corporation

Phone: +81-3-3533-7006 Email: OJI_CNF@oji-gr.com

Corporate Communication Department, USHIO INC.

Phone: +81-3-5657-1017 / FAX: +81-3-5657-1020 Email: <u>contact@ushio.co.jp</u>