

Toray is set to free touchscreens of scratches and smudges

February 1 2013, by Nancy Owano



Credit: Tech-on

(Phys.org)—Toray Industries has combined its no-scratch, no smudge technologies of 2012 and moved them up a notch with a recent demo at the nano tech 2013 exhibition in Japan. Toray showed off its touchscreen coating that is designed to self-repair scratches and to make fingerprint smudges easy to remove. The goal is to develop this special

protective substance for phones and tablets.

The special film is said to take care of small [scratches](#) and make fingerprints less visible and easy to clean. The self-cure action can remove marks in ten seconds. People in the habit of tablet-browsing while snacking, or accommodating children and friends who do the same, would no doubt appreciate the advancement here as well as users with more fastidious demands for smudge-free screens in tablets and smartphones. The technology involves a "nanometer" structure. Dirt from [fingerprints](#) is difficult to evaluate because its appearance and degree of adhesion vary depending on the environment and difference in the material, according to Toray. Other companies are also working on solutions, but Toray says its advantage over other attempts is being able to incorporate its oil-repellent and "[nanometre](#)" structure features.

There is a "nanochannel" construct, in which island structures are formed by dispersing a lipophilic material in an oil-repellent material. The oil-repellent material reduces the amount of fingerprint oil accumulating on the screen while the "[wettability](#)" of the lipophilic material spreads the fingerprint oil and makes it less visible. The company would like to [target](#) the film technology at mobile devices with touch-sensitive screens. That target opens wide doors, considering today's vendor glut of smartphones and tablets in the marketplace.

This is not Toray's first foray into film technologies for touchscreens. The company announced its self-repairing film projects last year. Researchers at that time said they had developed a film for hiding marks. The self-repairing film coating was dubbed Self-cure Coat Film, able to repair itself automatically when scratched. The company also discussed another film for reducing the unsightly buildup of smudges on screens.

More information: techon.nikkeibp.co.jp/english/...

[EN/20130131/263531/](#)

© 2013 Phys.org

Citation: Toray is set to free touchscreens of scratches and smudges (2013, February 1) retrieved 19 April 2024 from <https://phys.org/news/2013-02-toray-free-touchscreens-smudges.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.