Patent Granted in the United States for Microneedle Array Applicators

MEDRx Co., Ltd. received notification from the United States Patent and Trademark Office (USPTO) of the completion of the investigation concerning the application for a patent for the microneedle array applicator.

This patent involves an applicator that facilitates the reliable and easy insertion of microneedles in the skin. The patent is one of the key technologies at MEDRx for achieving the ease of skin puncturing and stress control needed for the reliable administration of drugs, which is the main advantage of MEDRx’s microneedle technology. The patent is expected to expire in 2031 and is also valid in Japan.

This patent will have no effect on the MEDRx Group’s results of operations in 2017.

<Reference>

Microneedle Array

A microneedle is a microscopic needle only a few hundred microns long that is made of a biodegradable resin. A microneedle array is a sheet with many of these needles. The applicator developed by MEDRx is shaped like an ikebana kenzan (pinholder) but its width is only a few hundred micrometers.

Microneedle arrays are used as one way to increase the skin permeability of drugs. The aim is to forcibly inject a drug to the dermis by using localized damage to the stratum corneum.

MEDRx has been performing R&D activities to create a pain-free method of administering drugs through the skin, which is disposable as well as safe and highly reliable, for vaccines, nucleic acid pharmaceuticals, protein pharmaceuticals and other drugs that currently require a syringe by using a microneedle array.