IOWN INTEGRAL

NTT R&D FORUM 2024

RESEARCH

γ 09-04

Transdermal drug/serum delivery technology using battery reactions

Towards the future of skincare —Iontophoresis Facial Mask—

#Well-being, Human Capital Management

///Technical Issue

Treatments with microcurrent have been gaining attention, especially in beauty salons, but they require large equipment or specialized devices, making it difficult to use them in everyday situations.

///Research Goal

We contribute to a future in skincare that offers a “luxurious at-home spa facial” and a world without the need for injections.

---Technology

Application of the electrode material derived from biocellulose, used in the development of low-environmental-load batteries, to facial masks. The flow of ions generated by battery reactions promotes the penetration of drugs and active ingredients.

---Novelty

The device eliminates the need for large equipment, making it environmentally friendly and easy to use at home. Furthermore, the penetration efficiency of drugs and active ingredients is improved by more than double compared to conventional non-woven masks without iontophoresis, enabling comfortable and effective treatments.

---Applicable Business

It can be applied to beauty masks, eye patches, and adhesive plasters in the fields of beauty, healthcare, and medicine. In particular, in the field of beauty, the aim is to commercialize the product within a few years.

Exhibitors = NIPPON TELEGRAPH AND TELEPHONE CORPORATION

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