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(54) **Title:** TOPICAL TERMAL DELIVERY DEVICE FOR NITRIC OXIDE DELIVERY

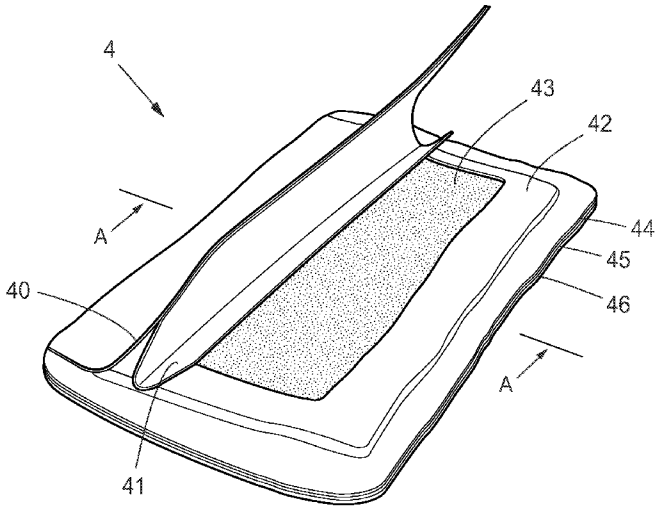


Fig. 4A

(57) **Abstract:** A topical dermal delivery device, such as a patch, for topical delivery of nitric oxide (NO) to treatment sites of mammals is disclosed. In an embodiment the patch has three layers; a backing with an activation window, a absorbent core as a reservoir and an NO permeable membrane with an adhesive layer towards the skin. The NO donor is applied into the device as a solution prior to application through the activation window. The window is closed after activation and the lid and backing is non-permeable for NO in order to increase the partial pressure of NO and thus the concentration of dissolved NO. The patch is fixated on the area to be treated with an adhesive layer that also assures sufficient contact throughout the treatment. The generated NO moves within the patch and can escape through the NO permeable membrane towards the area to be treated. Depending on therapy needed, the patch release curve differs and is chosen accordingly.

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