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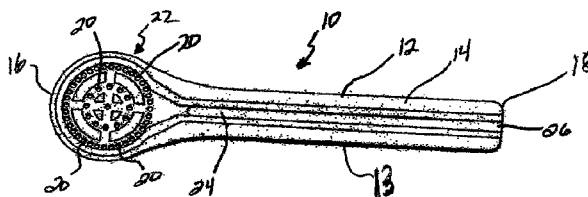
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(54) Title: EPITHELIAL DELAMINATING DEVICE (V) AND BLADES USEFUL IN THAT DEVICE



(57) Abstract: The described device is useful in the field of ophthalmology. The blades, devices, and methods for using them involve separating or lifting corneal epithelium from the eye in a substantially continuous layer to form an epithelial tissue member typically still attached to the cornea. The epithelial tissue member often is in the form of a flap or pocket. In particular, the devices utilize a non-cornea-cutting, oscillating blade that operates as a separator or dissector that is configured for example, by structure and lubricity, to separate the epithelium at naturally occurring cleavage surfaces in the eye, particularly between the epithelium and the corneal stroma (Bowman's membrane), specifically separating in the region of the lamina hida. The blade may be blunt and have an open region away from the dissector edge for providing lower frictional forces against the separated epithelium. The blade may have a blunt dissecting edge possibly made by first forming an edge sufficiently sharp cut epithelium and then electropolishing that edge to a substantially blunt edge appropriate for separating the epithelium from the cornea without cutting the cornea. The blade may be at least partially coated with one or more lubricious materials, preferably on the surfaces adjacent the epithelium during use. The separated epithelium may be lifted or peeled from the surface of the eye to form an epithelial flap or pocket. The epithelium may then be replaced on the cornea after a refractive procedure or replaced onto an ocular lens after placement of that ocular lens on the eye.



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