

Title (en)

ROTATIONAL ATHERECTOMY DEVICE WITH A SYSTEM OF ECCENTRIC ABRADING HEADS

Title (de)

ROTIERENDE ATHEREKTOMIEVORRICHTUNG MIT EINEM SYSTEM AUS EXZENTRISCHEN SCHLEIFKÖPFEN

Title (fr)

DISPOSITIF D'ATHÉRECTOMIE ROTATIF À SYSTÈME DE TÊTES D'ABRASION EXCENTRIQUES

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Application

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Abstract (en)

[origin: WO2017165013A1] The invention provides a rotational atherectomy device having, in various embodiments, a flexible, elongated, rotatable drive shaft with a system of eccentric abrading heads attached thereto. At least part of the eccentric enlarged abrading heads in the system have a tissue removing surface-typically an abrasive surface. In certain embodiments, the abrading heads may be at least partially hollow. Preferably the eccentric enlarged abrading heads have centers of mass spaced radially from the rotational axis of the drive shaft, facilitating the ability of the system of eccentric abrading heads to work together to open the stenotic lesion to a diameter substantially larger than the outer resting diameter of the enlarged abrading heads when operated at high speeds. Therefore, certain embodiments comprise a system having unbalanced centers of mass to not only stimulate greater rotational diameters but also arranged in a manner whereby a debris-removing augering effect occurs. Alternatively, other embodiments may comprise systems having abrading heads with balanced centers of mass.

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