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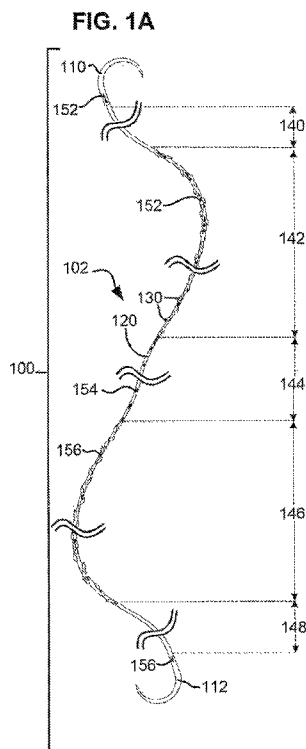
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(54) **Title:** CODED HETEROFUNCTIONAL SUTURES AND METHODS



(57) **Abstract:** A marked heterofunctional surgical filament. The filament comprises two or more sections having different features, and the different sections of the filament are provided with markers in order that they may be identified and differentiated. The filament may have retainers on the surface of one or more sections such that the filament can engage and retain tissue without knots. The markers may be used to indicate fixed features of a section of filament such as the presence and/or orientation of retainers. The markers may be utilized to indicate conditions of the filament such as tension. The markers may be directly readable or be machine-readable. The surgical filament is thin and flexible and may be used for suturing.

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