

Title (en)  
EXPANDING AND COLLAPSING APPARATUS AND METHODS OF USE

Title (de)  
AUSZIEH- UND ZUSAMMENKLAPPBARE VORRICHTUNG UND VERFAHREN ZUR VERWENDUNG

Title (fr)  
APPAREIL À DÉPLOIEMENT ET RESSERREMENT ET PROCÉDÉS D'UTILISATION

Publication  
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Application  
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Abstract (en)  
[origin: GB2545817A] The invention provides an expanding and collapsing ring apparatus 170 and method of use. The expanding and collapsing ring comprises a plurality of elements 177 assembled together to form a ring structure 172 oriented in a plane around a longitudinal axis. The ring structure is operable to be moved between a collapsed condition and a first expanded condition by movement of the plurality of elements 177 on actuation by an axial force. The apparatus further comprises a secondary expanding and collapsing mechanism 175/176 operable to move the ring structure between its collapsed condition (Fig 5B) or its first expanded conditions to a second expanded condition (Fig 6B) on actuation by an axial force. Applications of the invention include oilfield devices, including anti-extrusion rings, plugs, packers, locks, patching tools, connection systems, and variable diameter tools run in a wellbore.

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