

Title (en)
METHOD OF CONTROLLING A MANDREL-FREE SPINNING APPARATUS AND CONTROL SYSTEM

Title (de)
VERFAHREN ZUR STEUERUNG EINER DORNLOSEN SPINNVORRICHTUNG UND STEUERUNGSSYSTEM

Title (fr)
PROCÉDÉ DE COMMANDE D'UN APPAREIL DE FILATURE SANS MANDRIN ET SYSTÈME DE COMMANDE

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Application
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Abstract (en)
Aspects of the present invention relate to a method (100; 200) of controlling a mandrel-free spinning apparatus (10) to produce an article, having a target geometry (40), from a workpiece (14), the mandrel-free spinning apparatus (10) comprising: a rotatable mounting point (4) for the workpiece (14); a first forming tool (12a); and a second forming tool (12b); the method including: whilst the workpiece (14) rotates, moving the first forming tool (12a) so as to: engage a first surface (16) of the workpiece (14); and urge the workpiece (14), from an initial workpiece geometry, towards and beyond the target geometry (4) into an intermediate geometry (120); and whilst the workpiece (14) rotates, moving the second forming tool (12b) so as to: engage a second surface (18) of the workpiece (14), opposed to the first surface (16) of the workpiece (14); and urge the workpiece (14) from the intermediate geometry (120) towards the target geometry (40).

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Citation (applicant)
WO 2012042221 A1 20120405 - CAMBRIDGE ENTPR LTD [GB], et al

Citation (search report)

- [XAYI] US 2016325332 A1 20161110 - KAWASHIMA DAI [JP], et al
- [YDA] WO 2012042221 A1 20120405 - CAMBRIDGE ENTPR LTD [GB], et al
- [YA] JP S58205623 A 19831130 - MATSUSHITA ELECTRIC WORKS LTD
- [YA] WO 2019048358 A1 20190314 - NISSAN MOTOR MFG UK LTD [GB]

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