

Title (en)

METHOD OF FORMING BY NEEDLING AN ANNULAR TEXTILE PREFORM FROM A HELICAL FIBROUS WEB AND MACHINE FOR IMPLEMENTING SUCH A METHOD

Title (de)

VERFAHREN ZUR BILDUNG EINES RINGFÖRMIGEN TEXTILEN VORFORMLINGS DURCH VERNADELUNG AUS EINER SPIRALFÖRMIGEN FASERBAHN, UND MASCHINE FÜR DIE UMSETZUNG DIESES VERFAHRENS

Title (fr)

PROCEDE DE FORMATION PAR AIGUILLETAGE D'UNE PREFORME TEXTILE ANNULAIRE A PARTIR D'UNE NAPPE FIBREUSE HELICOIDALE ET MACHINE POUR LA MISE EN OEUVRE D'UN TEL PROCEDE

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Application

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Priority

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Abstract (en)

[origin: US2019071804A1] The invention provides a method of forming an annular textile preform by needling a helical fiber sheet, the method comprising in succession: unwinding a helical fiber sheet (8) from a horizontal sheet-forming turntable (6) driven at a constant and predefined speed of rotation NFS onto a horizontal intermediate unwinder (24) driven at a speed of rotation NDI and positioned on a horizontal intermediate turntable (22) driven at a speed of rotation NFI, unwinding the helical fiber sheet from the intermediate unwinder onto a final horizontal unwinder (12) driven at a speed of rotation NDF, and unwinding the fiber sheet from the final unwinder onto a horizontal preform-forming turntable (18) driven at a variable and predefined speed of rotation NFP so as to be subjected to needling thereon, the speeds NDI, NFI, and NDF being controlled in such a manner that NDF is proportional to NFP, $NFI = (NFS - NDF)/2$, and $NDI = (NFS + NDF)/2$.

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