A METHOD OF COATING A POROUS SUBSTRATE WITH A THERMOPLASTIC MATERIAL FROM THE OUTSIDE OF THE SUBSTRATE

Technical Field

[0001] A method of coating a first porous substrate with a thermoplastic material comprises the steps of: rotating the substrate about an axis of the substrate; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate. In some embodiments, the method includes coating a second porous substrate with the thermoplastic material. The method of coating can include coating the substrate with a desired quantity of material per a given length of the substrate.

Summary

[0002] ~~According to an embodiment, a method of coating a first porous substrate with a thermoplastic material comprises the steps of: rotating the substrate about an axis of the substrate; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate.~~According to an aspect of the present invention, there is provided a method of coating a first porous substrate with a thermoplastic material comprising the steps of: rotating the substrate about an axis of the substrate, wherein the substrate is a pipe or a screen, and wherein the substrate is part of a sand control assembly; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate, wherein the step of applying comprises applying the liquefied material from the outer diameter of the substrate through the porous portion of the substrate and into the inner diameter of the substrate.

[0003] ~~According to another embodiment, a method of coating a porous substrate with a thermoplastic material comprises the steps of: connecting a first porous substrate to a rotator; rotating the substrate about an axis of the substrate; pumping the material in a liquefied state from a receptacle to an application head; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate.~~According to another aspect of the present invention, there is provided a method of coating a first porous substrate with a thermoplastic material comprising the steps of: rotating the substrate about an axis of the substrate, wherein the substrate is a pipe or a screen, and wherein the substrate is a part of a sand control assembly; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate, wherein the material coats the outside of the substrate, fills the porous portion of the substrate, and coats the inside of the substrate during the step of applying.

[0003a] According to another aspect of the present invention, there is provided a method of coating a porous substrate with a thermoplastic material comprising the steps of: connecting a first porous substrate to a rotator, wherein the substrate is a pipe or a screen, and wherein the substrate is part of a sand control assembly; rotating the substrate about an axis of the substrate; pumping the material in a liquefied state from a receptacle to an application head; and applying the material in a liquefied state onto the substrate, wherein the step of applying is performed from the outside of the substrate, and wherein the inside of the substrate is fully or partially coated with the material during the step of applying.