

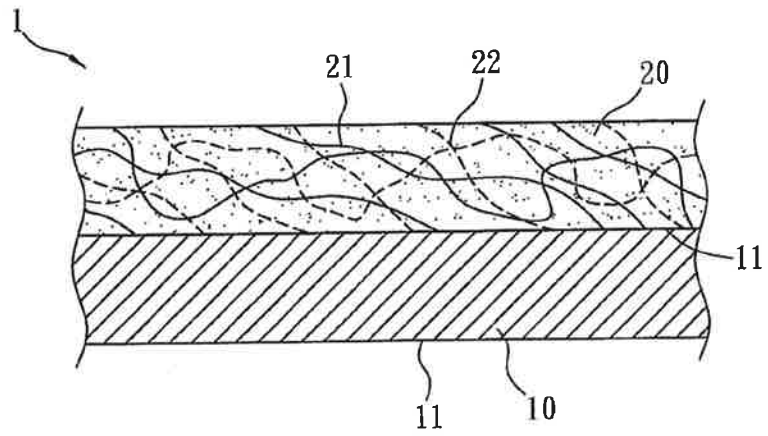


FIG. 1

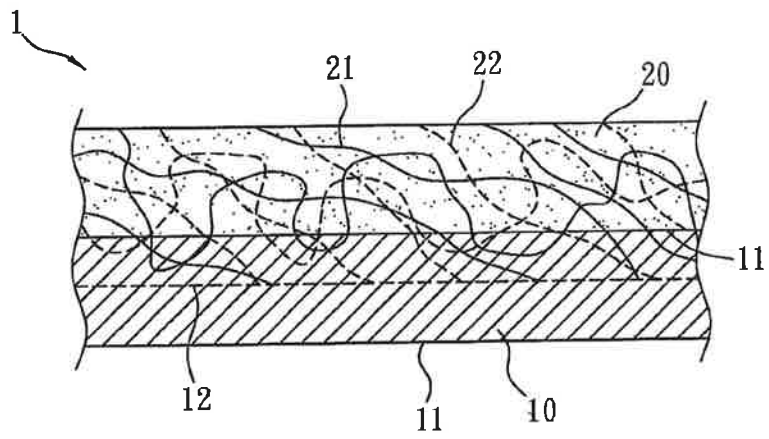


FIG. 2

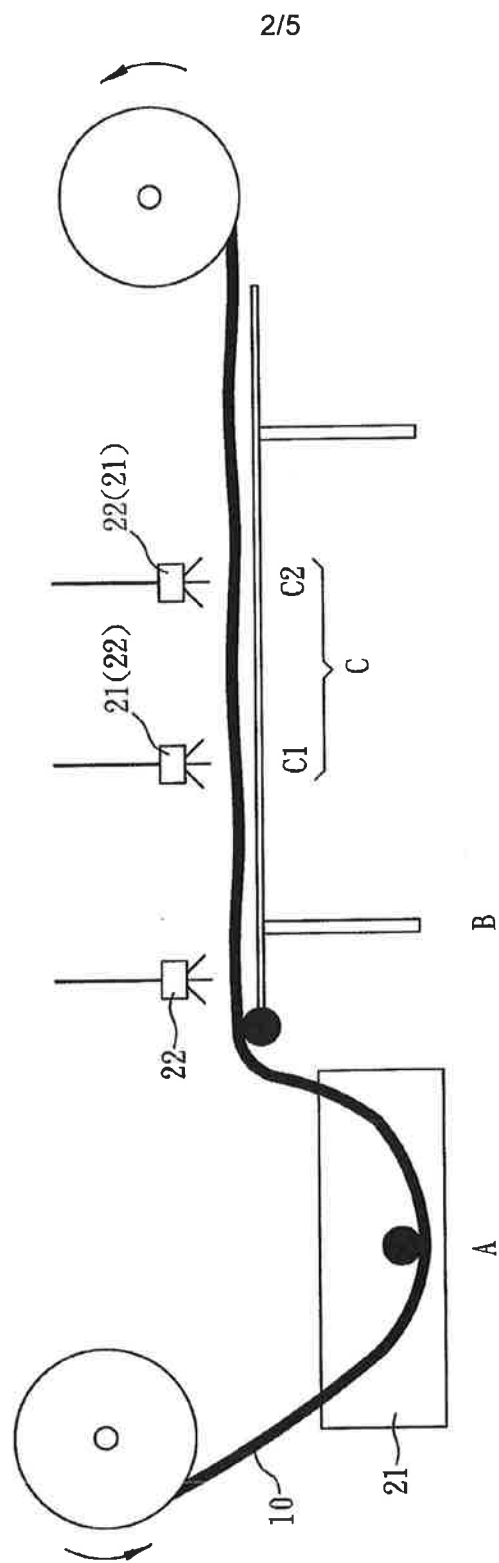


FIG. 3

(a) Providing a film carrier that absorbs liquid, an alginate solution containing a certain percent of sodium alginate or potassium alginate by weight (wt%) and a salt water solution containing a certain percent of divalent metal ions such as calcium ions by weight (wt%).



(b) Using at least two separate and successive processes to coat a layer of the alginate solution and a layer of the salt water solution respectively on at least one surface of the film carrier.



(c) Crosslinking the alginate in the alginate solution with the divalent metal ions in the salt water solution on the surface of the film carrier so as to form a hydrogel alginate membrane having a network structure, formed on the surface of the film carrier.

FIG. 4

(a) Providing a film carrier that absorbs liquid, an alginate solution containing a certain percent of sodium alginate or potassium alginate by weight (wt%) and a salt water solution containing a certain percent of divalent metal ions such as calcium ions by weight (wt%).



(b) Firstly at least one surface of the film carrier is coated with a layer of the alginate solution. Then a layer of the salt water solution is coated over the layer of the alginate solution.



(c) Crosslinking the alginate in the alginate solution with the divalent metal ions in the salt water solution on the surface of the film carrier so as to form a hydrogel alginate membrane having a network structure, formed on the surface of the film carrier.

FIG. 5

(a) Providing a film carrier that absorbs liquid, an alginate solution containing a certain percent of sodium alginate or potassium alginate by weight (wt%) and a salt water solution containing a certain percent of divalent metal ions such as calcium ions by weight (wt%).



(b) At least one surface of the film carrier is coated with a layer of the salt water solution and then a layer of an alginate solution is coated over the layer of the salt water solution.



(c) Crosslinking the alginate in the alginate solution with the divalent metal ions in the salt water solution on the surface of the film carrier so as to form a hydrogel alginate membrane having a network structure, formed on the surface of the film carrier.

FIG. 6