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(56) Documents Cited:
**US 20140034076 A1 US 20120251608 A1
US 20110182959 A1 US 20100136072 A1
US 20040030080 A1**

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INT CL **A01N, A61K, A61Q, B01D, C07C, C08F**
Other: **eKOMPASS (KIPO internal)**

(54) Title of the Invention: **Fibrous web comprising a cationic polymer for capturing microorganisms**
Abstract Title: **Fibrous web comprising a cationic polymer for capturing microorganisms**

(57) A fibrous web that includes a cationic polymer that contains a cationic monomer comprising a cationic functional group having an affinity for the negatively charged cell walls of bacteria and a hydrophobic monomer comprising a hydrophobic functional group is provided. The molar ratio of the cationic monomer to the hydrophobic monomer is greater than about 1:1. The affinity of the cationic polymer for the bacteria allows the web to capture bacteria, thereby removing them from a surface or liquid, without the use of harsh chemicals, and also inhibiting their spread to other surfaces and liquids that may contact the web.

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