

Title (en)

ANTIMICROBIAL PRE-VULCANIZED RUBBER COMPOSITIONS AND ANTIMICROBIAL VULCANIZED RUBBER ARTICLES

Title (de)

ANTIMIKROBIELLE VORVULKANISIERTE KAUTSCHUKZUSAMMENSETZUNGEN UND GEGENSTÄNDE AUS ANTIMIKROBIELLEM VULKANISIERTEM KAUTSCHUK

Title (fr)

COMPOSITION A BASE DE CAOUTCHOUC VULCANISE ANTIMICROBIEN ET ARTICLES EN CAOUTCHOUC VULCANISE ANTIMICROBIEN

Publication

EP 1618144 A4 20070221 (EN)

Application

EP 04760221 A 20040326

Priority

- US 2004009580 W 20040326
- US 42402403 A 20030425
- US 42411203 A 20030425
- US 42320403 A 20030425

Abstract (en)

[origin: WO2004096902A2] Non-silicone rubber articles that exhibit highly desirable long-term effective antimicrobial characteristics are provided. Such articles are in either solid or blown (foam or sponge) state (or combinations of both in multilayered forms) and can be utilized in a variety of applications. This invention utilizes the presence of non-sulfur-based curing systems and agents, such as bisphenols and peroxides, that permit vulcanization and do not irreversibly bind silver ions thereto, thereby resulting in long-term antimicrobial performance of the rubber article. This invention further provides a simple method of producing such an antimicrobial vulcanized non-silicone rubber article. This invention also encompasses certain non-silicone pre-vulcanized raw rubber formulations made from at least a majority by weight of non-silicone rubber that includes silver-based components to provide highly desirable long-term antimicrobial characteristics within the ultimate cured rubber articles made therefrom.

IPC 8 full level

C08K 3/00 (2006.01); **C08K 3/08** (2006.01); **C08K 3/22** (2006.01)

CPC (source: EP)

C08K 3/013 (2017.12); **C08K 3/015** (2017.12); **C08K 3/08** (2013.01); **C08K 3/22** (2013.01)

Citation (search report)

- [X] US 6455610 B1 20020924 - LEVER JOHN G [US], et al
- [X] WO 02077095 A2 20021003 - MILLIKEN & CO [US]
- See references of WO 2004096902A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004096902 A2 20041111; **WO 2004096902 A3 20051006**; BR PI0409713 A 20060502; EP 1618144 A2 20060125; EP 1618144 A4 20070221; JP 2006524740 A 20061102

DOCDB simple family (application)

US 2004009580 W 20040326; BR PI0409713 A 20040326; EP 04760221 A 20040326; JP 2006509435 A 20040326