(12) United States Patent

Petrova et al.

(10) Patent No.: US 8,822,579 B1 (45) Date of Patent: Sep. 2, 2014

(54) FROST-RESISTANT RUBBER BASED ON PROPYLENEOXIDE RUBBER AND NATURAL BENTONITES

(71) Applicants: Nataliya Nikolaevna Petrova, Yakutsk (RU); Viktoriya Vitalievna

Portnyagina, Yakutsk (RU)

(72) Inventors: Nataliya Nikolaevna Petrova, Yakutsk

(RU); Viktoriya Vitalievna Portnyagina, Yakutsk (RU)

(73) Assignees: North-Eastern Federal University, Yakutsk (RU); Science Inst of Oil and Gas Problems of SB RAS, Yakutsk (RU)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(56) References Cited

FOREIGN PATENT DOCUMENTS

RU 2284338 C1 * 9/2006 RU 2294346 C1 * 2/2007

OTHER PUBLICATIONS

Petrova et al. "Rubbers Based on Mixtures of PropyleneOxide Rubber and Polytetrafluoroethylene", Kauchuk I Rezina, 2007, vol. 4, pp. 8-11 *

Chernikov et al. "Development of Formulations of Building Hermetic Compounds", Issue 4 (8), 2010.*

* cited by examiner

Primary Examiner - Michael M Bernshteyn

(74) Attorney, Agent, or Firm - Nadya Reingand; Yan

Hankin