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(19) **United States**(12) **Patent Application Publication**
SUZUKI et al.(10) **Pub. No.: US 2023/0230720 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **STRETCHABLE CABLE****B25J 19/00** (2006.01)**H01B 11/02** (2006.01)(71) Applicant: **Proterial, Ltd.**, Tokyo (JP)(52) **U.S. Cl.**(72) Inventors: **Kanako SUZUKI**, Tokyo (US); **Seiji KOJIMA**, Tokyo (JP); **Tamotsu KIBE**, Tokyo (JP); **Keisuke SUGITA**, Tokyo (JP)CPC **H01B 7/065** (2013.01); **H01B 7/02** (2013.01); **B25J 19/0025** (2013.01); **H01B 11/02** (2013.01); **H01B 11/22** (2013.01)(21) Appl. No.: **18/155,132**

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A stretchable cable is provided that allows an extra length to be reduced when routed in a movable part. The stretchable cable includes an elastically deformable hollow insulation having a hollow portion that is continuous along a cable longitudinal direction, and at least one electricity- or light-conducting wire-shaped body provided in a spiral shape along the cable longitudinal direction and fixed to the hollow insulation to stretch and contract together with the hollow insulation. The cable is elongated not less than 1.2 times when a tensile force is applied, and the cable returns to an original length when the tensile force is removed.

