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(19) **United States**(12) **Patent Application Publication**
Al-Ali et al.(10) **Pub. No.: US 2023/0230726 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **AUTOMATED ASSEMBLY SENSOR CABLE****Publication Classification**(71) Applicant: **MASIMO CORPORATION**, Irvine, CA (US)(72) Inventors: **Ammar Al-Ali**, San Juan Capistrano, CA (US); **Yassir Abdul-Hafiz**, Irvine, CA (US); **William Jack MacNeish, III**, Newport Beach, CA (US); **Kevin Forrest**, Rancho Santa Margarita, CA (US)(51) **Int. Cl.****H01B 9/02** (2006.01)**A61B 5/1455** (2006.01)**H01B 7/08** (2006.01)**H01B 7/36** (2006.01)(52) **U.S. Cl.**CPC **H01B 9/028** (2013.01); **A61B 5/14552** (2013.01); **H01B 7/0823** (2013.01); **H01B 7/36** (2013.01); **Y10T 29/49149** (2015.01); **Y10T 29/49174** (2015.01); **Y10T 29/49147** (2015.01); **H01B 7/0861** (2013.01)(21) Appl. No.: **18/084,257**(22) Filed: **Dec. 19, 2022****Related U.S. Application Data**

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(57)

ABSTRACT

An automated assembly sensor cable has a generally wide and flat elongated body and a registration feature generally traversing the length of the body so as to identify the relative locations of conductors within the body. This cable configuration facilitates the automated attachment of the cable to an optical sensor circuit and corresponding connector. In various embodiments, the automated assembly sensor cable has a conductor set of insulated wires, a conductive inner jacket generally surrounding the conductor set, an outer jacket generally surrounding the inner jacket and a registration feature disposed along the surface of the outer jacket and a conductive drain line is embedded within the inner jacket. A strength member may be embedded within the inner jacket.

