(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 258 246 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 71

(48) Corrigendum issued on:
22.11.2023 Bulletin 2023/47

(43) Date of publication:
11.10.2023 Bulletin 2023/41

(21) Application number: **23160533.8**

(22) Date of filing: **07.03.2023**

(51) International Patent Classification (IPC):
G09B 23/28 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
G09B 23/285

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **10.04.2022 US 202217717091**

(71) Applicant: **Fresenius Medical Care Holdings, Inc.**
Waltham, MA 02451-1457 (US)

(72) Inventors:
- **TREVINO, Samuel**
  San Ramon, CA (US)
- **SLOAT, Daniel L.**
  Wakefield, MA (US)
- **LOAKIMEDES, George**
  Antelope, CA (US)

(74) Representative: **Frick, Robert**
Lorenz Seidler Gossel
Rechtsanwälte Patentanwälte
Partnerschaft mbB
Widenmayerstraße 23
80538 München (DE)

(54) **TRAINING PROSTHETIC FOR SELF-CANNULATION TRAINING**

(57) A simulated cannula for a self-cannulation training system is provided. The simulated cannula includes a coupler that houses an LED light source and includes an electrical conductor and an optical fiber extending therefrom. The coupler can couple to a off-the-shelf cannula that can be easily modified for such purpose. The training system also includes a cannulation pad, a control unit, and first and second indicators. The control unit can include a rechargeable battery. The first indicator is activated when the cannula needle electrically completes the cannulation electrical circuit. The second indicator is activated when the cannula needle infiltrates or bypasses the simulated access and completes the infiltration electrical circuit. Methods of training a patient for self-cannulation, using the simulated cannula and training systems, are also provided.

EP 4 258 246 A8