



UNIVERSITÀ DEGLI STUDI DI MILANO

SELEZIONE PUBBLICA, PER TITOLI ED ESAMI, PER IL RECLUTAMENTO DI N. 2 UNITÀ DI TECNOLOGO DI PRIMO LIVELLO CON RAPPORTO DI LAVORO SUBORDINATO A TEMPO DETERMINATO DELLA DURATA DI 18 MESI, PRESSO L'UNIVERSITÀ DEGLI STUDI DI MILANO - DIPARTIMENTO DI FISICA ALDO PONTREMOLI, PER L'ATTUAZIONE DEL PROGRAMMA DI RICERCA E INNOVAZIONE DAL TITOLO "MUSA - MULTILAYERED URBAN SUSTAINABILITY ACTION" (CUP G43C22001370007) NELL'AMBITO DEL PIANO NAZIONALE DI RIPRESA E RESILIENZA (PNRR) - CODICE 22255

La Commissione giudicatrice della selezione, nominata con Determina Direttoriale n. 4877 del 30.3.2023, composta da:

Prof. Mario Benassi	Presidente
Prof. Paolo Milani	Componente
Dott.ssa Paola Bagnoli	Componente
Dott.ssa Francesca Baccino	Segretaria

comunica i quesiti relativi alla prova orale:

Gruppo quesiti 1

1. Modelli ed esperienze di percorsi di scouting dei risultati della ricerca universitaria.
2. Leggere e tradurre un paragrafo del testo in inglese allegato (brevetto internazionale numero WO 2021/224253A1, pagina 3).

Gruppo quesiti 2

1. Best practice nell'analisi della prior art brevettuale
2. Leggere e tradurre un paragrafo del testo in inglese allegato (brevetto internazionale numero WO 2021/224253A1, pagina 3).

Milano, 8 maggio 2023

La Commissione

Prof. Mario Benassi - Presidente

Prof. Paolo Milani - Componente

Dott.ssa Paola Bagnoli - Componente

Dott.ssa Francesca Baccino - Segretaria

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(71) Applicants: **OSPEDALE SAN RAFFAELE S.R.L.** [IT/IT]; Via Olgettina, 60, 20132 Milano (MI) (IT). **POLITECNICO DI MILANO** [IT/IT]; Piazza Leonardo da Vinci 32, 20133 Milano (MI) (IT).

(72) Inventors: **LANDONI, Giovanni**; Ospedale San Raffaele S.r.l., 20132 Milano (MI) (IT). **ZANGRILLO, Alberto**; Ospedale San Raffaele S.r.l., 20132 Milano (MI) (IT). **CONSOLO, Filippo**; Ospedale San Raffaele S.r.l., 20132 Milano (MI) (IT). **REDAELLI, Alberto**; Politecnico di Milano, 20133 Milano (MI) (IT). **FIORE, Gianfranco Beniamino**; Politecnico di Milano, 20133 Milano (MI) (IT).

CAIMI, Alessandro; Politecnico di Milano, 20133 Milano (MI) (IT).

(74) Agent: **CAPASSO, Olga** et al.; Via Vincenzo Bellini, 20, 00198 Rome (IT).

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(54) Title: NON-INVASIVE VENTILATION SYSTEM FOR THE PRE-HOSPITAL MANAGEMENT OF ACUTE RESPIRATORY FAILURE

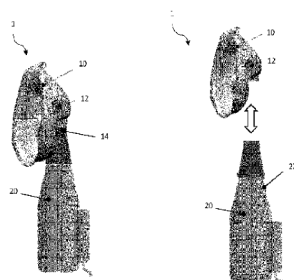


FIG. 1A

FIG. 1B

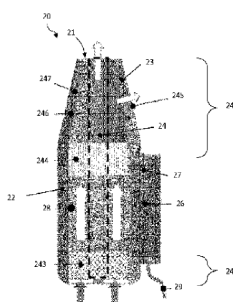


FIG. 1C

(57) Abstract: Stand-alone continuous positive airways pressure, CPAP, apparatus (1) to contrast respiratory failure of a patient comprising a face-mask (10) to deliver continuous pressured air to the patient's airways, and an electro-mechanical device (20) having a housing (22) directly and rigidly connectable to the face-mask (10) to supply air to said face-mask (10) at a controlled pressure value, the electro-mechanical device (20) comprising a pneumatic channel (24) for flowing air to be delivered to the face mask (10) and a control unit (26) for automatically managing the value of the pressure of the air inside the pneumatic channel (24), wherein the apparatus (1) comprises a turbine fan (28) connected to the control unit (26) and located in the housing (22) of the electro-mechanical device (20) for pressurizing atmospheric air to a determined pressure level value, and wherein the pneumatic channel (24) includes an inlet portion (241) located upstream of the turbine fan (28) to receive atmospheric air, and an outlet portion (242) located downstream of the turbine fan (28) to deliver the pressurized air to the face-mask (10) through an outlet opening (21), the pneumatic channel (24) longitudinally extending from said inlet portion (241) to said outlet portion (242).

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Non-invasive ventilation system for the pre-hospital management of acute respiratory failure

TECHNICAL FIELD

5

The present invention relates to a medical system and particularly to a stand-alone continuous positive airways pressure, CPAP, apparatus. Also, the present invention relates to a non-invasive ventilation system.

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BACKGROUND

Respiratory failure is a severe, life-threatening medical emergency that affects every year >10% of the population and is characterized by high mortality (>20%). Its prevalence is growing incessantly; a recent survey by the Istituto Superiore di Sanità estimated that respiratory failure will become the third cause of death in Italy by 2020. It represents a severe burden to the healthcare system, with >100,000 hospitalizations/year, accompanied by prolonged hospital stay in the intensive care unit (ICU) for advanced and expensive therapies (>1 million hospital days/year). Considering that 75% of healthcare costs for respiratory failure are linked to hospitalization in the highly specialized ICU, anticipating the intervention and improving the prognosis will result in a reduced need for hospitalization and/or prolonged hospital stay, i.e., reduction of the costs associated with the treatment of the disease.

30 To contrast respiratory failure, techniques employing continuous positive airway pressure (CPAP) are used which apply mild air positive pressure on a continuous basis. It keeps the