

Title (en)
HAND HELD SKIN TREATMENT SPRAY SYSTEM

Title (de)
TRAGBARES HAUTBEHANDLUNGSSPRÜHSYSTEM

Title (fr)
SYSTÈME DE PULVÉRISATION PORTABLE POUR LE TRAITEMENT DE LA PEAU

Publication
EP 2506984 A4 20130529 (EN)

Application
EP 10835235 A 20101203

Priority
• US 26681009 P 20091204
• US 91035410 A 20101022
• US 2010058996 W 20101203

Abstract (en)
[origin: US2011133001A1] A spray nozzle system for skin treatments includes separate air outlets moving over the skin surface to deliver one or more streams of supplemental air for the purpose of warming or drying the skin surface to improve efficacy and comfort of the spraying experience. The drying air from the auxiliary ports may be applied while spray is emitted from the nozzle to increase the spray cloud temperature, or may be applied before or after the spray application, with the spray turned off, to warm or dry the skin. A heating source is provided to warm the air directed through one or more supplemental air ports. In the case of air-atomizing nozzles, the supplemental air is delivered through low pressure ports separately from the air emitted through the nozzle's atomizing and pattern shaping orifices to minimize the expansion cooling effect inherent with the spray nozzle ports. In another implementation, the airflow is redirected from the nozzle jets to one or more of the supplemental ports using a control valve which proportions the amount of airflow directed to the main atomizer air jets, the pattern shaping air jets and the supplemental air for drying the skin.

IPC 8 full level
A61M 35/00 (2006.01); **B05B 7/08** (2006.01)

CPC (source: EP US)
A61M 35/003 (2013.01 - EP US); **B05B 7/066** (2013.01 - EP US); **B05B 7/0815** (2013.01 - EP US); **B05B 7/0838** (2013.01 - EP US); **B05B 7/1209** (2013.01 - EP US); **B05B 7/162** (2013.01 - EP US); **B05B 7/1626** (2013.01 - EP US); **A61M 35/25** (2019.04 - EP); **B05B 1/005** (2013.01 - EP US); **B05B 5/03** (2013.01 - EP US)

Citation (search report)
• [XY] US 4394967 A 19830726 - AMIAUT JEAN [FR]
• [X] US 5558276 A 19960924 - BARRETT MARK C [US], et al
• [X] DE 3720938 A1 19890105 - FUCHS PETER [DE]
• [X] DE 3540990 A1 19870521 - KOLLER HEINRICH
• [X] WO 2004033107 A2 20040422 - SPRAYING SYSTEMS CO [US]
• [Y] US 2006214027 A1 20060928 - MICHELI PAUL R [US]
• [XP] WO 2010012903 A1 20100204 - GOURDIN HERVE [FR], et al
• See references of WO 2011069133A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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