



A NEW DEVICE FOR A NEW RESCUE PROCEDURE

Vittorio Bellagamba
Thomas Scalisi
Nicola Campani



emergency stretcher



“the perfect device does not exist!”



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



emergency stretcher

- there are many types available
- problems comes from:
 - * dimensions
 - * weight
 - * load capacity
 - * stiffness
 - * environment protection capacity
 - * strenght
 - * reliability



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



emergency stretcher

the compact/lightweight solution

- * carry only the external frame/bag
- * stiffen using the “air”

“INFLATABLE BOARD”

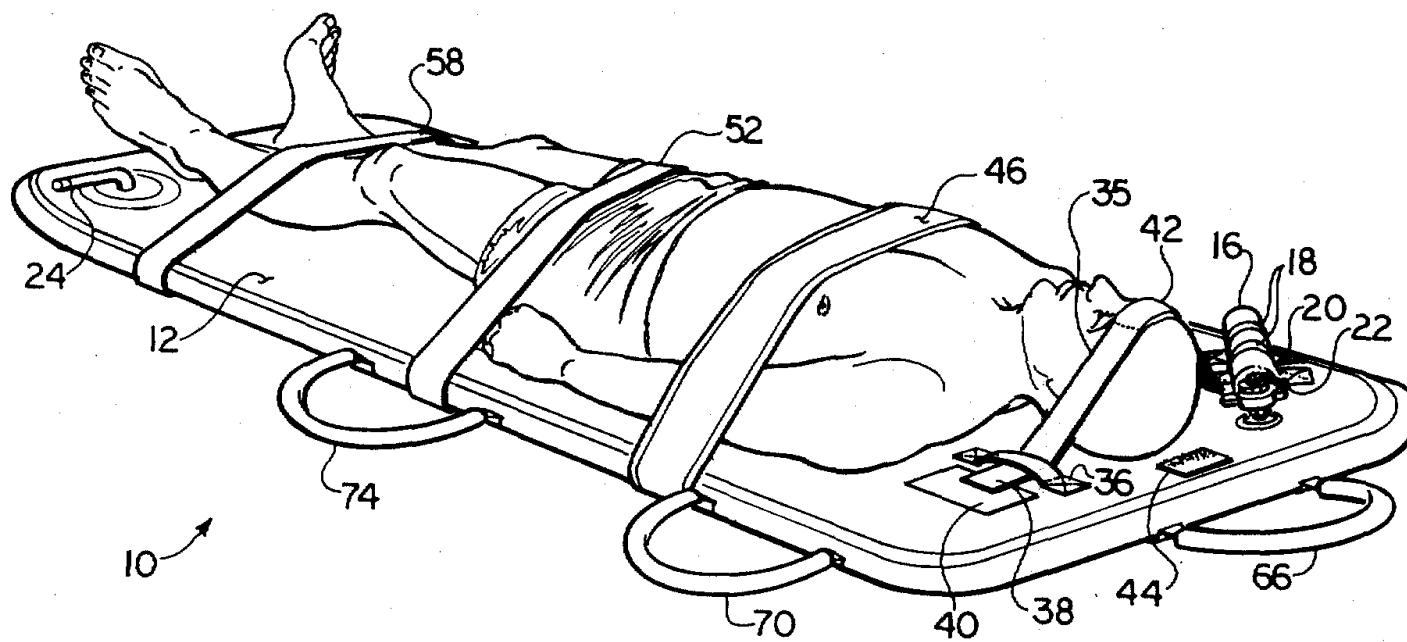


Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Inflatable board limits

- * first contemporary patent in 1976



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Inflatable board limits

- * damages due to abrasion
- * need for a pumping system
- * keep the right pressure
- * load capacity
- * stiffness



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Pneuspine solutions

- * sturdy fabric frame
- * different inflation systems
- * low pressure safety valve
- * new special materials according to the use
- * stiffness (in a wide range of pressures)



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Pneuspine procedures

- * spine support into different stretcher
- * as support of patient body on hoistable bag
- * swiftwater rescue stretcher
- * open water rescue emergency stretcher
- * etc. (following your needs...)



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



as SKED stretcher spine support



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



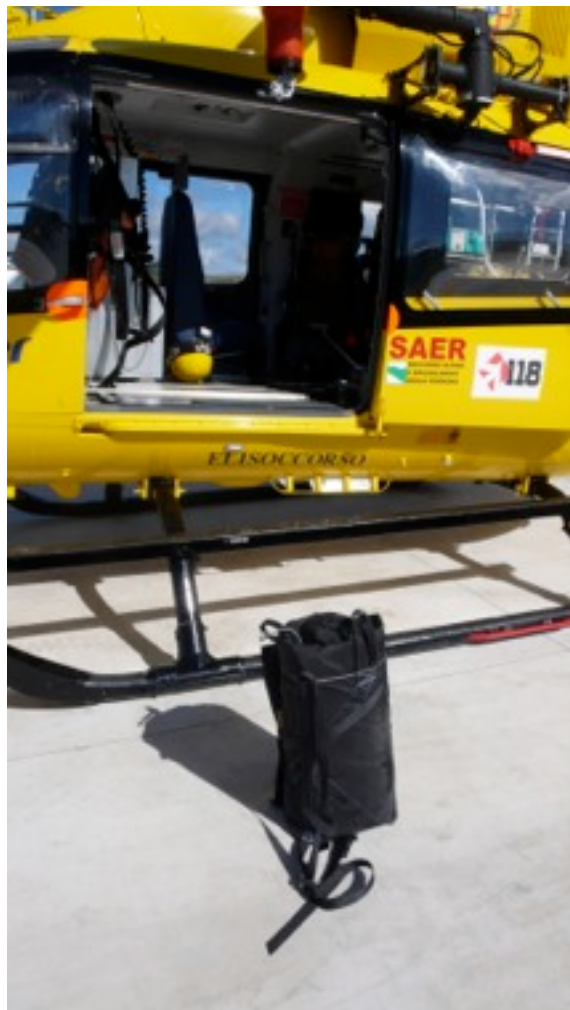
Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



as hoist
ops bag
spine
support



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi

as high altitude expedition emergency stretcher

Tested in ChoOyu 2008 Exp. (camp I, 6500 m)
and Gasherbrum 2011 Exp. (camp I)



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi

“Northwall Pneuspine”



prototype A



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi



Pneuspine features

- * 4.0 kg (8.0 kg with hoist bag)
- * 55x12x12 cm (deflated)
- * 186x44,5x10 cm (inflated)
- * low pressure
- * inflatable with any gas (argon suggested)



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi

benefit

- * patient “bouncing protection”
- * high thermal insulation (argon improved)
- * applicable as rescue transfer sheet
- * floating
- * comfortable



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi

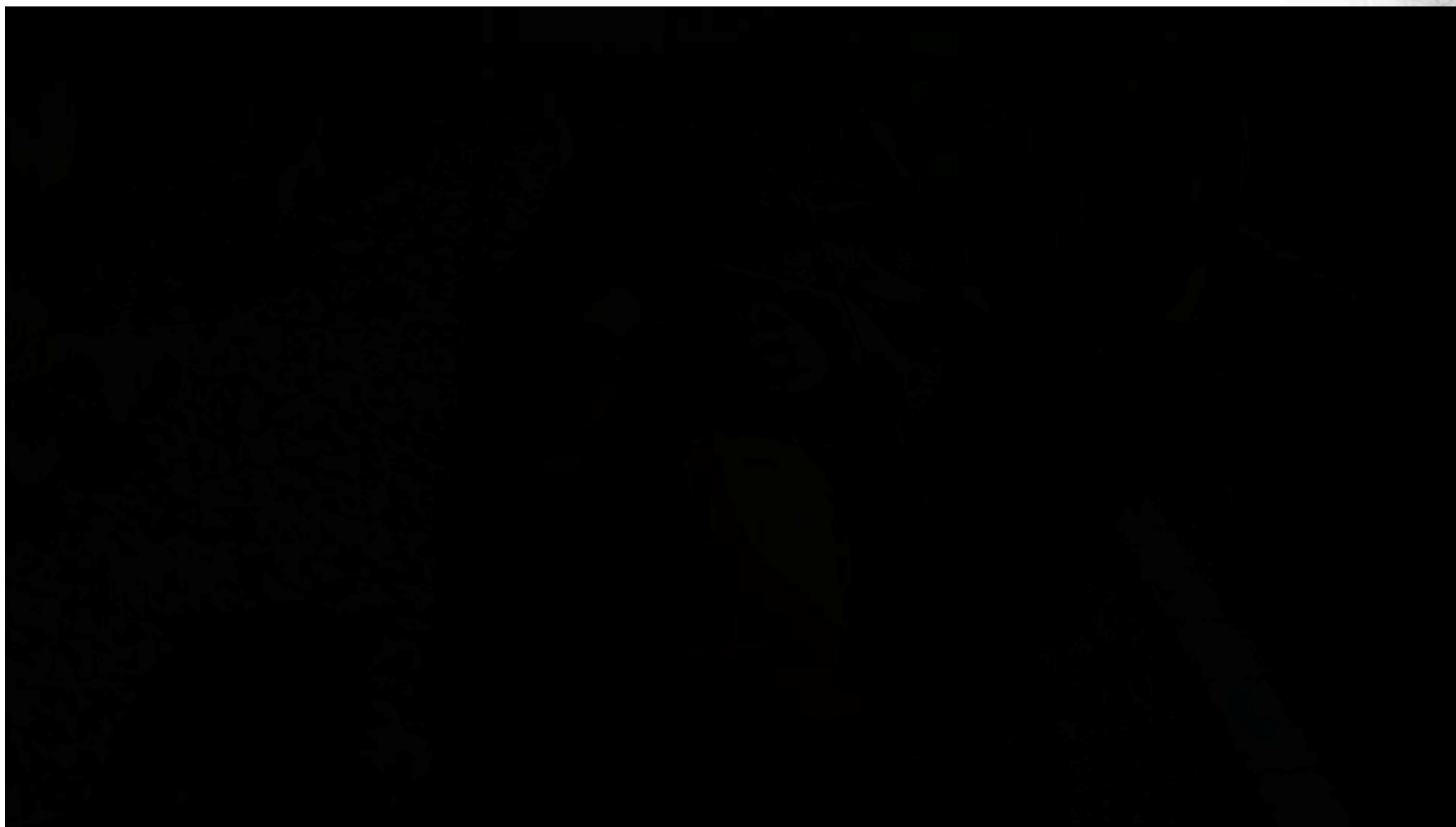


now imagine
new procedures!



Nicola Campani
Vittorio Bellagamba
Thomas Scalisi





Nicola Campani
Vittorio Bellagamba
Thomas Scalisi