



Keywords

**Medical device** 

Portable Real value

Intellectual Property Priority patent FR 1550439 applied 01/20/15 PCT/FR2015/053578 applied 12/17/15 US, CA, JP, EP

Development

Status

**Physiotherapists** 

(TRL6)

Functional prototypes

Developed with hospital

Physical Medicine Rehabilitation Ergometer an<u>kle</u>

## Dispositif for evaluation and rehabilitation

## Technology



B.O.T.T.E Boot Design, Open Chain, Three Dimensions, Transportable Ergometer



## Benefits

- Returns the real value of the force developed in the ankle, the patient cannot take support on other parts of his body or engage other muscles to increase power output.
- (values are overestimated by 40% with other ergometers)
- We only mesure the strength of the plantar flexor muscles.
- The measurement may be done in the supine or sitting position.
- Allows a early assessment of the patient's ability to be mobilized ==> more rapid mobilization of the patient.
- Can be used to motivate and rehabilitate the patient through the use of playful force feedback on a screen which allows a performance gain for the patient by 20%
- Portable
- Reduced cost compared to other ergometers.

## Applications

Partnership

Patent licensing or collaboration

- Evaluation, Rehabilitation and early motivation of lying or sitting patients.
- Potentially concerns all hospitals services, not just functional rehabilitation

François-Xavier DENIMAL Business Developer +33 6 13 84 36 28 francois-xavier.denimal@sattnord.fr



SATT Nord 25, avenue Charles St Venant – 59800 LILLE – France +33 3 28 36 04 68 – <u>tech@sattnord.fr</u>