



Biomedical
Diagnostics,
Monitoring
Systems &
Technology

Heating and Cooling Device of Human Muscles

[application areas]

The invention is used for warming up human body and treating it by cooling it down, also warming up or cooling down muscles by athletes, preparing muscles for physical activity as well as restoring the functional capacity after heavy physical workloads.

[authors]

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[features, technical specifications]

Human muscle heating-cooling unit consisting of several thermoelectric modules (TEM) and temperature sensors, and is controlled using a personal computer or a microprocessor. There is a heat insulator

installed between both temperature sensors, used for measuring the heat flux applied to the muscle. Temperature between -15°C and +50°C, highest temperature change rate – 1°C/sec.

[technological readiness level]

Demonstration prototype.

[commercialisation]

Exploring opportunities.

[what are we looking for in this stage of development?]

Looking for funding sources and partners for further research and finishing the prototype.

[alternatives] None.



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