



(12) Patent specification

(10) SE 539 655 C2

(21) Patent application number:	1650029-0	(51) Int.Cl.:	
(45) Grant of patent:	2017-10-24	H05B 6/62	(2006.01)
(41) Available to the public:	2017-07-13	H05B 6/50	(2006.01)
(22) Filing date:	2016-01-12		
(24) Effective date:	2016-01-12		
(30) Priority data:	---		

(73) Patentee:	Antrad Medical AB, Finlandsgatan 14, 3 tr, 164 74 Kista SE
(72) Inventor:	Pierre WESTIN, Täby SE Joachim SÄLLVIN, Saltsjö-Boo SE Anders BJÖRKMAN, Sundbyberg SE
(74) Agent:	Brann AB, Box 3690, 103 59, Stockholm SE
(54) Title:	Heater and Method for Thawing/Warming a Perishable Dielectric Load
(56) Cited documents:	---
(57) Abstract:	

A heater (100) for thawing/warming a perishable dielectric load (130) contains: a heating chamber (140) for holding the perishable dielectric load (130) during thawing/warming thereof, a transmitter unit (110) generating electromagnetic energy (RFs) having predefined spectral properties, an emitting element (150) producing an electromagnetic field in the perishable dielectric load (130) based on the electromagnetic energy (RFs) from the transmitter unit (110), a tuning circuit (115) adjusting an overall impedance (Z) of the emitting element (150), the tuning circuit (115) and the heating chamber (140) so that the overall impedance (Z) matches an output impedance of the transmitter unit (110), and a control unit (120) measuring the overall impedance (Z) during thawing/warming of the perishable dielectric load (130) and repeatedly generating at least one control signal (Tn) causing the tuning circuit (115) to adjust the overall impedance (Z) to match the output impedance of the transmitter unit (110). The control unit (120) sets an initial value of the at least one control signal (Tn) based on an estimate (Vm) of a volume (V) of the perishable dielectric load (130).

