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The invention relates to an induction-based cooking appliance comprising multiple heating power transferring elements (3a, 3b) and multiple heating power energy units (5a, 5b) for powering said heating power transferring elements (3a, 3b), each heating power energy unit (5a, 5b) comprising one or more power switching devices, in particular power transistors, for providing electrical power to the heating power transferring elements (3a, 3b), wherein: —said power switching devices, in particular power transistors, included in said multiple heating power energy units (5a, 5b) are wide bandgap power switching devices, in particular wide bandgap transistors, comprising more in particular semiconductor materials with a bandgap greater than 2 eV, and/or are configured to be operated in a first frequency range (FR1) and in a second frequency range (FR2) different or at least essentially identical, in particular identical, to the first frequency range (FR1); or—a first heating power transferring element (3a) is powered by a heating power energy unit (5a) comprising a first type (T1) of power switching device, in particular power transistor, adapted to be operated in a first frequency range (FR1) and a second heating power transferring element (3b) is powered by a heating power energy unit (5b) comprising a second type (T2) of power switching device, in particular power transistor, adapted to be operated in a second frequency range (FR2) different or at least essentially identical, in particular identical, to the first frequency range (FR1).

