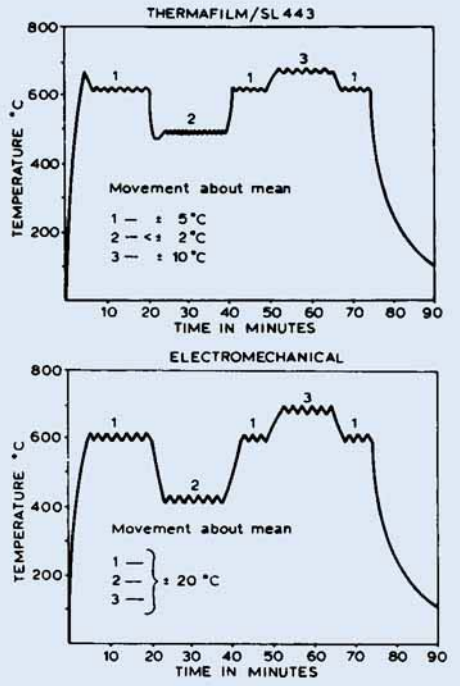

Fig. 8 A comparison between the performance of an electronic and an electromechanical system illustrates the advantages of the former. The temperature indicated is that measured on the surface of a glass ceramic top cooker panel by a standard measuring system. The conditions were: 1 Free radiation, 2 Aluminium pan with a ground base 15 cm diameter containing one litre of water, and placed centrally on the hot area of the cooker, 3 Empty milk pan 11 cm diameter, concave base placed centrally

(v) True hot hob indication is given by temperature measurement.

(vi) Potential capability for domestic pan watcher and simmerstat control.

Conclusion

The platinum resistance thermometer, a long established scientific tool, is finding increasing use for a wide variety of industrial applications. Accurate measurement and control of temperature can make a significant contribution to the conservation and efficient use of thermal energy both in the workplace and the home; Thermafilm®—a low cost, high accuracy, durable thick film platinum resistance detector, provides an efficient method of achieving this. Devices of many configurations are being evaluated at present for a number of both existing and new applications.

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3 Industrial Temperature Control Markets in Europe, Marketing Report No. E341, Frost and Sullivan Inc. New York, 1980

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The Conversion and Storage of Solar Energy

The belief that solar energy harnessed by photochemical processes may be able, in the future, to make a worthwhile contribution to the energy requirements of the world is supported by many of the results being reported by a growing number of workers in this rapidly expanding field of research.

The present interest in the production of hydrogen and oxygen by the visible-light photolysis of water was highlighted in a recent review of The Third International Conference on Photochemical Conversion and Storage of Solar Energy, by Professor Sir George Porter, F.R.S. whose group at The Royal Institution, London, is actively engaged in this area (*Nature (London)*, 1980, **288**, (5789), 320–321).

Platinum and ruthenium dioxide are known to be electrolytically active for the evolution of hydrogen and oxygen, respectively, and Professor Michael Grätzel and colleagues at the Institute of Physical Chemistry, Lausanne reported the decomposition of water using these two catalysts, together with ruthenium trisbipyridyl as the light sensitiser and methyl viologen as the carrier, in a single system without sacrificial electron donors or acceptors.