DIAGNOSTIC OF MELANOMAS VIA IMAGE PROCESSING

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ABSTRACT:

Non-contact measuring of skin temperature is used in dermatology as diagnostic method for malignant melanomas and other skin deseases [1,2,3]. The method helps to examine pathological processes under the skin and is useful for a decision on minimal-surgical or non-surgical therapy. In a first step of investigation it is necessary to get knowledge about the required resolution in temperature and space.

METHOD:

After a visual inspection of the skin regions of interest the temperature map were measured by a 2D infrared thermography equipment INFRAMETRICS 760. The infrared images were further processed by a computer (see Fig. 1).

Thermography systems with radiation sensors fulfil in addition to the requirement of non-contact measurement the conditions of the spectral sensitivity in the range

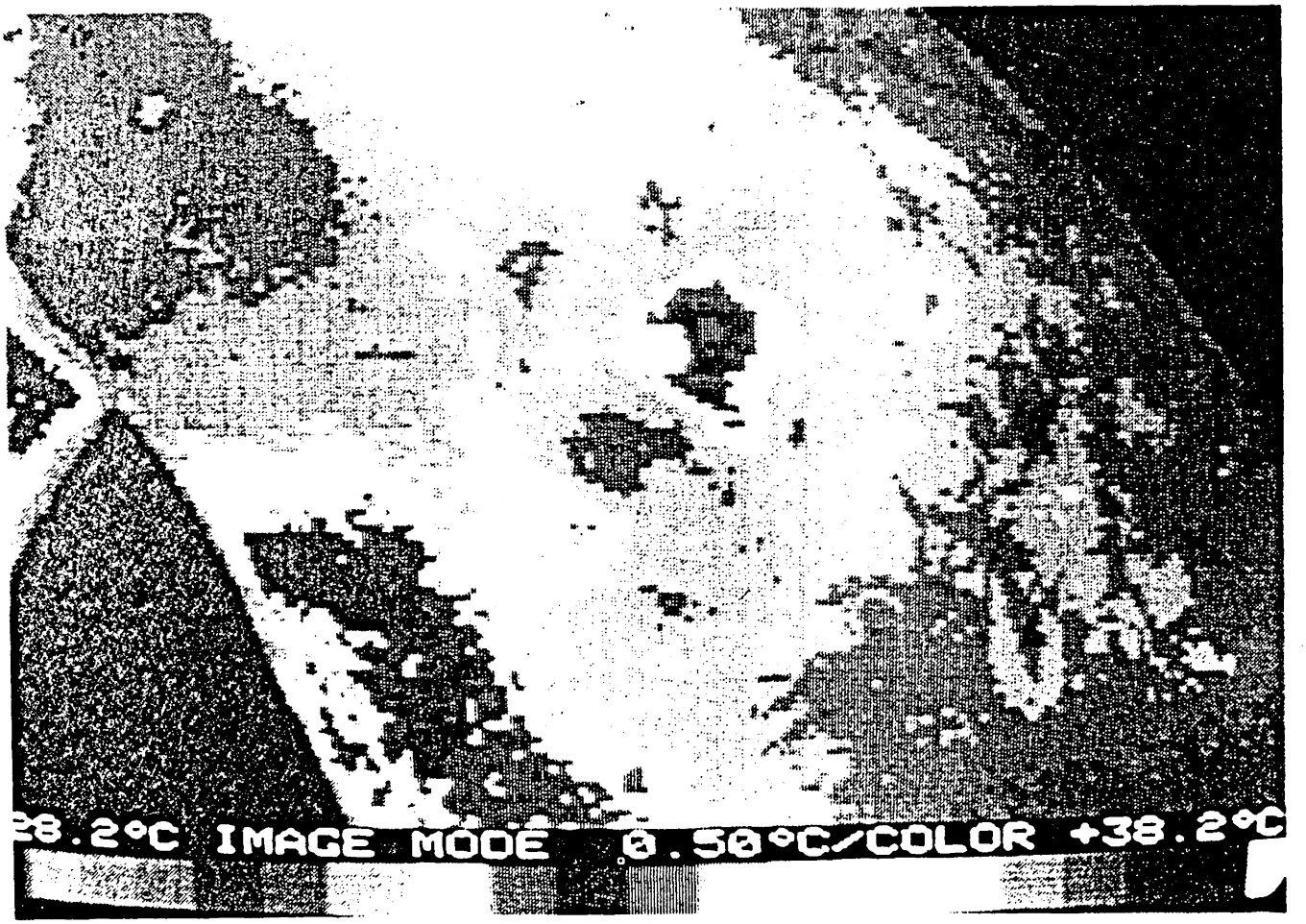

Fig. 1: Thermography image of a right thigh with a pathological process in the centre