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(54) Title: METHOD AND SYSTEM FOR THE EXAMINATION OF A SAMPLE BY MEANS OF THERMOGRAPHY

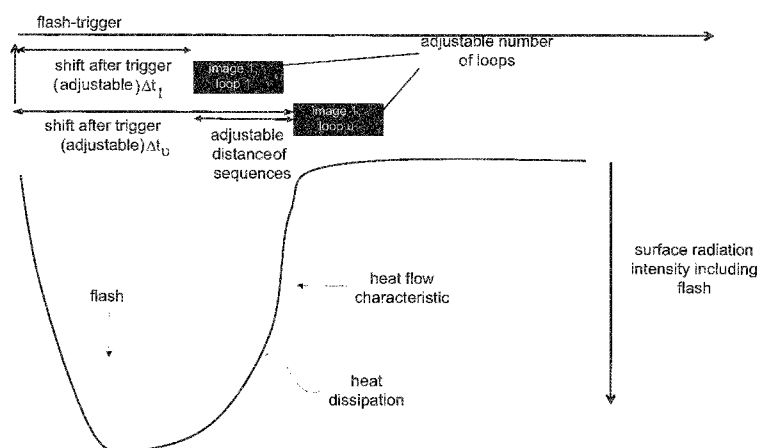


Fig. 4

(57) Abstract: The invention provides a method for a non-destructive, non-contacting and image forming examination of a sample by means of heat flow thermography. The method comprises exciting the sample at least twice independently from each other by means of the heat pulses from the excitation source; taking a first thermal image of the surface of the sample at a first time distance Δt_1 from a first triggering of the heat pulse which first time distance Δt_1 is characteristic for gradients in heat flow velocity in a first depth below the surface of the sample; taking a second thermal image of the surface of the sample at a 1 second time distance Δt_2 from a second triggering of the heat pulse which second time distance Δt_2 is characteristic for gradients in heat flow velocity in a second depth below the first depth; and taking any thermal images of the surface of the sample at a further time distances Δt_n from any subsequent triggering of the heat pulse which further time distances Δt_n are characteristic for gradients in heat flow velocity in further depths lying deeper as the second depth; and extracting from the thermal images an indication of the presence of any gradients of heat flow velocity at the respective depth distances from a surface of the sample. The system is configured to carry out the above method.