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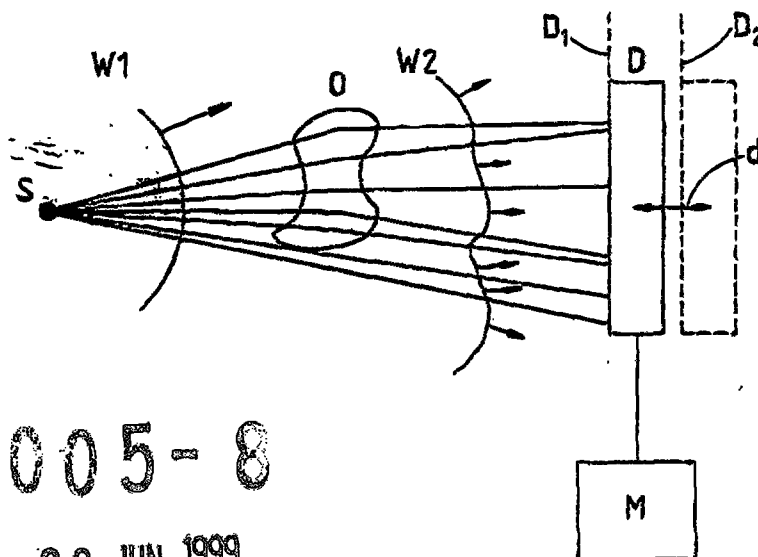
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(54) Title: PHASE RETRIEVAL IN PHASE CONTRAST IMAGING



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(57) Abstract

A method of obtaining an image of the phase change introduced by an object in penetrating radiation incident on the object includes irradiating the object with penetrating radiation having high lateral spatial coherence, and receiving at least a portion of the radiation at a detector after the radiation has emerged from the object and thereby obtaining and storing at least two intensity records for the received radiation each including intensity values at predetermined intervals. These values are utilised to derive a grid of values defining an image of the phase change introduced by the object in the penetrating radiation. The intensity records are obtained at a uniform finite distance after the radiation has emerged from the object, and are for respective different energy distributions of the detected radiation. Apparatus is also disclosed.