

Title (en)
SCANNING SQUID MICROSCOPE WITH IMPROVED SPATIAL RESOLUTION

Title (de)
RASTER-SQUID-MIKROSKOP MIT VERBESSERTER RÄUMLICHER AUFLÖSUNG

Title (fr)
MICROSCOPE SQUID A BALAYAGE A RESOLUTION SPATIALE AMELIOREE

Publication
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Application
EP 01975166 A 20010914

Priority
US 0126024 W 20010914

Abstract (en)
[origin: WO03025603A1] A scanning SQUID microscope (30) for acquiring spatially resolved images of physical properties of an object (84) includes a SQUID sensor (56) arranged in perpendicular to the plane of the object under investigation for detecting tangential component of the magnetic field generated by the object. During scanning of the SQUID sensor (56) over the object (84) under investigation, the position signal from a position interpreting unit, as well as relevant output signals from the SQUID sensor (56) are processed by a processing unit which derives from the data, spatially resolved images of the physical properties of the object. The specific orientation of the SQUID sensor (56) with respect to the plane of the object (84) permits an enlarged area of the SQUID chip on which the modulation and feedback line (100) can be fabricated in the same technological process with the SQUID sensor. Additionally, larger contact pads (120) afforded provide for lower contact resistance and ease in forming contact with bias and read-out wires.

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