Recent SQUID Activities in Europe, Part I: Devices

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Abstract – We present an overview of SQUID research and development in Europe. The tutorial information and historical background are kept at a minimum; we also mention only briefly the theoretical contributions and more fundamental experiments. Rather, we concentrate on practical SQUIDs and SQUID readout and highlight selected recent advances. Today, the SQUID itself is a rather mature device. Current research and development work concentrates mostly on satisfying needs imposed by novel applications, which often require more complicated SQUID circuits, including SQUID serial arrays and auxiliary devices on one chip. In closing, we mention the European foundry and current industrial capabilities. Applications are covered by Part II of this overview to be published separately.

Submitted April 6, 2009; accepted April 20, 2009. Reference No. CR12-I; Category 4.

Keywords – Magnetic flux quantum, SQUID, Josephson junction, RCSJ, magnetometer, gradiometer, flux transformer, SQUID amplifier, SQIF.