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(54) **DATA EXCHANGE WITH RESOURCE CONSTRAINED TECHNOLOGY IN SURGICAL ENVIRONMENT**

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(57) **ABSTRACT**

A system and method for performing a secure data transfer between computing devices comprise registering a resource-constrained computing device with a cloud-based computer. A client computing device generates session state information regarding the client computing device in an electronic communication exchange with at least one remote computing device. An identifier provides a location of the session state information stored at a cloud-based computer. A machine-readable code associated with the identifier is displayed for querying the cloud for the stored session state information. The resource-constrained computing device uses the machine-readable code to retrieve the session state information. The resource-constrained computing device uses the session state information to join the electronic communication exchange. Alternatively, in lieu of a machine-readable code, a cryptography process is performed, which includes generating a public cryptographic certificate associated with an immutable identifier of a portable device to be integrated in the exchange.