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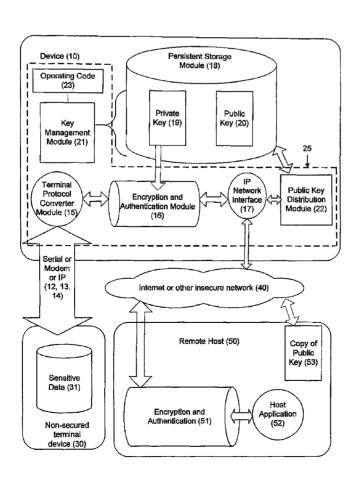
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(54) Title: SECURITY ENABLER DEVICE AND METHOD FOR SECURING DATA COMMUNICATIONS



(57) Abstract: A security enabler device has a key management module adapted to generate and store security keys and to destroy the generated keys if necessary to protect security. encryption and authentication module is linked to the data storage module and is adapted to use the security keys to provide secure network communications for a terminal device connected to or incorporated in the security enabler device. The key management module operates in conjunction with an operating code module to prevent access to at least one of the security keys from outside the security enabler device.



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| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | | |
| Category* | Citation of document, with indication, where app | propriate, of the relevant passages | Relevant to claim No. | |
| × | US 2004/0185931 A1 (LOWELL et al.) 23 September 2004 (23.09.2004), entire document, especially para [0118], [0120], [0129]-[0130], [0138], [0164], [0171]-[0172], [0177]-[0181], [1086] -[0187], [0265] | | 1-5, 8 and 20 | |
| Y | | | 6-7, 9-12 and 21 | |
| | | | | |
| • | US 2005/0144448 A1 (ENGLAND et al.) 30 June 2005 (30.06.2005); entire document, especially para [0082]-[0083], [0107], [0120], [0138] | | 13-16 | |
| X | | | 9-12, 17-19 and 21 | |
| ĭ | | | 0 12, 11 70 4.10 2.1 | |
| • • | UD 0003/033550 A4 // IEDEDMAN of al.) 18 December | or 2003 (18 12 2003); entire document | 17 | |
| Y | US 2003/0233558 A1 (LIEBERMAN et al.) 18 December 2003 (18.12.2003); entire document, especially Abstract; para [0056] | | · · | |
| | · | | | |
| Y | US 2002/0003803 A1 (KAMETANI) 10 January 2002 (10.01.2002); entire document, especially para [0006], [0061], [0065], [0072]; | | 6-7 and 18-19 | |
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