We Claim

1.   A security acceleration board (114) for converting between encryption schemes in a Wireless Application Protocol (WAP) gateway, comprising:

a controller (300) to receive data encrypted according to a first encryption scheme and control the transmission of the data; and

a first hardware device (302) coupled to the controller to decrypt the data according to the first encryption scheme;

a second hardware device (304) coupled to the first hardware device (302) and the controller (300) to receive the decrypted data from the first hardware device (302), and encrypt the decrypted data according to the second encryption scheme; and

memory (308) to store the data during conversion from the first encryption scheme to the second encryption scheme, wherein the controller is to prevent access to the memory from outside the board during the conversion.

2.   The apparatus as claimed in claim 1, wherein the controller is to receive data encrypted according to a Secure Sockets Layer Protocol from a content provider server.

3. The apparatus as claimed in claim 1, wherein the controller is to receive data encrypted according to a Wireless Transport Layer Security Protocol from a client wireless device.

4. The apparatus as claimed in claim 1, wherein the first hardware device (302) is to encrypt the data according to a Wireless Transport Layer Security Protocol.

5. The apparatus as claimed in claim 1, wherein the second hardware device (304) is to encrypt data according to a Secure Sockets Layer Protocol.

6. The apparatus as claimed in claim 1, wherein the first hardware device comprises an Application Specific Integrated Circuit.

7. The apparatus as claimed in claim 1, wherein the first hardware device comprises a Field Programmable Gate Array.

8. The apparatus as claimed in claim 1, wherein the first and second hardware devices are Field Programmable Gate Arrays.

9. The apparatus as claimed in claim 1, wherein the first and second hardware devices are Application Specific Integrated Circuits.
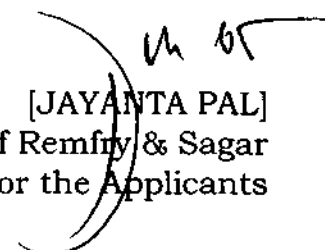
10. The apparatus as claimed in claim 1, wherein the first encryption scheme comprises a Secure Sockets Layer Protocol.

11. The apparatus as claimed in claim 1, wherein the first encryption scheme comprises a Wireless Transport Layer Security Protocol.

12. The apparatus as claimed in claim 11, wherein the second encryption scheme comprises a Secure Sockets Layer Protocol.

13. The apparatus as claimed in claim 12, wherein the Wireless Transport Layer Security Protocol.

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