

receiving a discrete graphical choice from the sequence of discrete graphical choices, wherein the sequence of discrete graphical choices corresponds to a sequence of images.

56. The apparatus of claim 48 further comprising a logic element in signal communication with the graphical interface, the logic element causing the graphical interface to display at least one memory cue in response to a point on the graphical interface being highlighted.

57. The apparatus of claim 56 wherein the logic element causes a first icon from a plurality of icons to be displayed on the graphical interface in response to a first point on the image on the graphical interface being highlighted; and wherein the logic element causes a second icon from the plurality of icons to be displayed on the graphical interface in response to a second point on the image on the graphical interface being highlighted.

58. The apparatus of claim 48 wherein a discrete graphical choice in the sequence of discrete graphical choices comprises a selected icon from a plurality of icons displayed on the graphical interface.

59. A method for generating a cryptographic secret from a visual password, the method comprising the steps of:

receiving a secret pattern on a graphical interface, wherein the secret pattern comprises a sequence of discrete graphical choices;

converting each discrete graphical choice in the sequence of discrete graphical choices into a value to produce a

sequence of values, wherein the sequence of values corresponds to the sequence of discrete graphical choices;

selecting a codeword from a plurality of codewords for each value in the sequence of values to generate a sequence of codewords, the plurality of codewords being associated with an error-correcting code; and manipulating the sequence of codewords to produce a cryptographic secret.

60. The method of claim 59 further comprising calculating an offset between each value in the sequence of values and the corresponding codeword in the sequence of codewords to generate a sequence of offsets for use in re-generating the secret.

61. The method of claim 59 wherein the selecting step comprises applying a decoding function of an error-correcting code to each value in the sequence of values to generate a sequence of codewords.

62. The method of claim 59 wherein the manipulation step comprises applying a hash function to the sequence of codewords.

63. The method of claim 59 further comprising using the cryptographic secret as an encryption key.

64. The method of claim 59 further comprising using the cryptographic secret in a digital signature algorithm or an identification algorithm.

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