Claims

1. A method for allowing or denying operational access to a trusted accessory, the method being implemented by the trusted accessory comprising:

detecting an accessory-access-request event associated with the trusted accessory, the accessory-access-request originating from a communication device;

generating a seed sequence having a first number of seed-sequence elements;

outputting an indication of at least one seed-sequence element via a user interface of the trusted accessory;

receiving from the communication device at least one seed-sequence-element-modifier signal for at least one of the seed-sequence elements, the at least one seed-sequence-element-modifier signal received responsive to an input to a user interface of the communication device;

modifying the generated seed sequence in accordance with the at least one received seed-sequence-element-modifier signal;

comparing the modified seed sequence with a stored access sequence for the trusted accessory; and

granting operational access to the trusted accessory when the modified seed sequence matches the stored access sequence; and

denying operational access to the trusted accessory when the modified seed sequence does not match the stored access sequence.

2. The method of claim 1, wherein each seed-sequence element is part of an ordered set.

3. The method of any of claims 1-2, wherein at least one seed-sequence element is an element selected from the group consisting of (i) a number, (ii) an alphabetical character, (iii) a color in an ordered set of colors, (iv) an image in an ordered set of images, and (v) a sound in an ordered set of sounds.

4. The method of any of the claims 1-3, wherein:

at least one of the seed-sequence-element-modifier signals comprises an increment-seed-sequence-element command; and

modifying the generated seed sequence in accordance with a received increment-seed-sequence-element command comprises incrementing a corresponding seed-sequence element.

5. The method of any of the claims 1-4, wherein:

at least one of the seed-sequence-element-modifier signals comprises a decrement-seed-sequence-element command; and

modifying the generated seed sequence in accordance with a received decrement-seed-sequence-element command comprises decrementing a corresponding seed-sequence element.

6. The method of any of the claims 1-5, wherein:

at least one of the seed-sequence-element-modifier signals comprises an output-different-element command; and

modifying the generated seed sequence in accordance with a received output-different-element command comprises outputting an indication of a random seed-sequence element.

7. The method of any of the claims 1-6, wherein modifying the generated seed sequence comprises modifying the generated seed sequence on an element-by-element basis.

8. The method of any of the claims 1-7, wherein outputting the indication of each seed-sequence element via the user interface of the trusted accessory comprises outputting one or both of an audible indication of each seed-sequence element and a visual indication of each seed-sequence element.

9. The method of any of the claims 1-8, wherein outputting the indication of each seed-sequence element via the user interface of the trusted accessory comprises outputting the indication of each seed-sequence element prior to receiving any seed-sequence-element-modifier signal.

10. The method of any of the claims 1-8, wherein outputting the indication of each seed-sequence element via the user interface of the trusted accessory comprises alternating between outputting each respective seed-sequence element and receiving the corresponding seed-sequence-element-modifier signal.

11. The method of any of the claims 1-10, further comprising outputting an indication of an updated value of a seed-sequence element as modified in response to a received seed-sequence-element-modifier signal.

12. The method of any of the claims 1-11, wherein comparing the modified seed sequence with the stored access sequence comprises comparing the modified seed sequence with the stored access sequence in response to modifying the generated seed sequence.

13. The method of any of the claims 1-11, wherein comparing the modified seed sequence with the stored access sequence comprises comparing the modified seed sequence with the stored access sequence in response to receiving a validate-modified-seed-sequence command.

14. The method of any of the claims 1-14, wherein the communication device is an untrusted device, and the at least one received seed- sequence-element-modifier signal is sent from the user interface of the untrusted device.

15. An apparatus comprising a tangible computer-readable medium having instructions stored thereon that when executed cause a processor to perform the method as claimed in any one of the preceding claims.