CLAIMS

We claim:

1. A machine-implemented method for authenticating a user session, comprising:

displaying a personalized digital image on a display screen ~~172~~;

receiving a user drawing set executed by a user, the user drawing set superimposed on ~~over~~ the personalized digital image and having a user drawing set member, the user drawing set member having a user touch point selecting a position on the personalized digital image and a user gesture selecting a set of positions on the personalized digital image; and

authenticating access to the user session if the position or the set of positions on the personalized digital image ~~user drawing set~~ match~~es~~ a library position~~drawing~~ set associated with the user.

2. The method of claim 1, further comprising:

tracing the user drawing set onto the personalized digital image.

3. The method of claim 1, wherein the user gesture ~~drawing set~~ includes ~~at least one of a user touch point,~~ a user circle gesture, a user line gesture, or ~~and~~ a user freestyle form gesture.

~~4. The method of claim 1, further comprising:~~

~~receiving an initial library drawing set input from the user; and~~

~~creating the library drawing set from the initial library drawing set input.~~

~~5.~~4. The method of claim 1, further comprising, prior to authenticating access to the user session:

associating the ~~a~~ user drawing set member with a user position set;

associating a library drawing set member with the ~~a~~ library position set; and

determining that the user drawing set member and the library drawing set member match ~~in part~~ if the user position set is within a position tolerance value of the library position set~~.~~, and

wherein authenticating access to the user session is responsive to determining that the user drawing set member and the library drawing set member match.

5. The method of claim 4, further comprising:

receiving an initial library drawing set input from the user; and

creating the library drawing set member from the initial library drawing set input.

6. The method of claim 5, further comprising:

receiving a confirmation library drawing set input from the user; and

displaying a reentry request if the confirmation library drawing set input does not match the initial library drawing set input.

7. The method of claim 6, further comprising:

tracing a training library drawing set over the personalized digital image if the confirmation library drawing set input does not match the initial library drawing set input.

8. The method of claim 4, wherein the user drawing set member is a first user drawing set member, the user drawing set further includes a second user drawing set member, the second user drawing set member having a user line gesture and further comprising:

associating the second user drawing set member with a user vector set;

associating a second library drawing set member with a library vector set; and

determining that the second user drawing set member and the second library drawing set member match if the user vector set is within a vector tolerance value of the second library vector set, and

wherein authenticating access to the user session is further responsive to determining that the second user drawing set member matches the second library drawing set member within the vector tolerance value.

9. The method of claim 8, further comprising:

adjusting the vector tolerance value based on at least one of a user accuracy, a user profile, or a user setting.

10. The method of claim 4, further comprising:

associating the library drawing set member with a set of timing data indicating at least one of duration of entry or speed of entry.

11. The method of claim 4, wherein the user drawing set includes two or more additional user drawing set members and authenticating access to the user session authenticates if a majority of the user drawing set members match a majority of respective library drawing set members.

12. The method of claim 4, wherein the user drawing set includes multiple drawing set members and authenticating access to the user session authenticates access to the user session if an aggregate comparison score of the multiple drawing set members relative to

their respective multiple library drawing set members does not exceed a maximum limit for deviation.

13. The method of claim 1, further comprising:

requesting reentry of the user drawing set if the position or the set of positions of the user drawing set member does not match the library position set associated with the user.

14. The method of claim 1, further comprising:

requesting a text password if the position or the set of positions of the user drawing set member does not match the library position set associated with the user.

~~6. The method of claim 5, further comprising:~~

~~associating a user drawing set member with a user vector set;~~

~~associating a library drawing set member with a library vector set; and~~

~~determining the user drawing set member and the library drawing set member match in part if the user vector set is within a vector tolerance value of the library vector set.~~

~~7. The method of claim 1, further comprising:~~

~~associating a library drawing set member with a set of timing data indicating at least one of duration of entry and speed of entry.~~

~~8. The method of claim 1, further comprising:~~

~~determining that the user drawing set matches the library drawing set if a majority of user drawing set members matches a majority of library drawing set members.~~

~~9. The method of claim 1, further comprising:~~

~~determining that the user drawing set matches the library drawing set based on an aggregate comparison score.~~

~~10.~~15. A ~~tangible machine-readable medium~~computer-readable storage device having a set of instructions ~~detailing a method~~ stored thereon that when executed by one or more processors cause the one or more processors to perform a ~~the method, the~~ method comprising:

displaying a digital image on a display screen;

receiving, from a user and superimposed over the digital image on the display screen, a user drawing set having ~~at least one user gesture; and~~one or more user drawing set members, at least one of the user drawing set members having a user touch point selecting a position on the digital image and a user gesture selecting a set of positions on the digital image;

associating one of the user drawing set members with a user position set;

associating a library drawing set member with a library position set;

determining that the user drawing set member and the library drawing set member match if the user position set is within a position tolerance value of the library position set; and

authenticating access to a user session ~~if the user drawing set matches a library drawing set associated with the user~~ responsive to determining that the user drawing set member matches the library drawing set member.

~~11.~~16. The ~~tangible machine-readable medium of~~ computer-readable storage device as recited in claim 15~~10~~, wherein the user drawing set member is the user gesture, the user gesture ~~is at least one of~~being a user circle gesture, a user line gesture, or~~and~~ a user freestyle form gesture.

~~12.~~17. The ~~tangible machine-readable medium of~~ computer-readable storage device as recited in claim 15~~10~~, wherein the method further comprises:

receiving the digital image from a ~~personalized~~ digital image library provided by the user.

~~13.~~18. The ~~tangible machine-readable medium of~~ computer-readable storage device as recited in claim 15~~10~~, wherein the method further comprises:

setting a minimum library set size and a minimum complexity level for a library drawing set that includes the library drawing set member and is associated with the user.

~~14.~~19. A picture signature password system, comprising:

a display screen ~~172~~ to display a personalized digital image;

a user input device ~~160~~ to receive, superimposed ~~from a user~~ over the personalized digital image on the display screen, a user drawing set having a user touch point selecting a position on the personalized digital image and a ~~at least one~~ user gesture selecting a set of positions on the personalized digital image; and

a processor ~~120~~ to authenticate access to a user session if the position or the set of positions selected by the user touch point or the user gesture on the personalized digital image, respectively, matches, within position tolerance values, a library position set~~user drawing set matches a library drawing set associated with the user~~.

~~15.~~20. The picture signature password system of claim 19~~14~~, wherein the user input device is at least one of an interactive stylus, a mouse, a direct motion input, or a touch screen, the touch screen integrated into the display screen.