35. The method of claim 31 wherein the predetermined criteria comprises an acceptable level of soiling.

36. The method of claim 23 further comprising authenticating the secure instruments.

37. The method of claim 23 further comprising introducing a trapping material into the supercritical fluid to remove at least a portion of the one or more substances from the supercritical fluid.

38. The method of claim 23 further comprising recirculating the supercritical fluid.

~~39. An apparatus for cleaning a secure instrument including a substrate, visual data and a security feature, comprising:~~

~~a chamber containing a supercritical fluid at a temperature and a pressure and for a duration sufficient to clean the substrate and not compromise the security feature and the visual data of the secure instrument; and~~

~~a structure for holding the secure instrument in the chamber so that the supercritical fluid circulates through and around the secure instrument to remove one or more substances into the supercritical fluid.~~

~~40. The apparatus of claim 39 further comprising an agitation mechanism for circulating the supercritical fluid through and around the secure instrument in the chamber.~~

~~41. The apparatus of claim 39 wherein the structure for holding the secure instrument comprises a tray.~~

~~42. The apparatus of claim 39 wherein the visual data comprises an image, authentication data, or both.~~

~~43. The apparatus of claim 39 wherein the one or more substances comprise contaminants, dirt, sebum, pathogens, or any combination of these.~~

~~44. The apparatus of claim 39 wherein at least one of the one or more substances are soluble in the supercritical fluid.~~

~~45. The apparatus of claim 39 wherein to clean comprises to disinfect.~~

~~46. The apparatus of claim 39 wherein the supercritical fluid comprises $C0_2$.~~

~~47. The apparatus of claim 39 wherein the supercritical fluid further comprises an ionic liquid or another gas.~~

~~48. The apparatus of claim 39 wherein the supercritical fluid further comprises a trapping material for removing at least a portion of the one or more substances from the supercritical fluid.~~

~~49~~39. An apparatus for cleaning a plurality of secure instruments, each secure instrument including a substrate, visual data and a security feature, comprising:

a sorter for determining whether the secure instruments have one or more properties that satisfy one or more predetermined criteria;

a structure for holding secure instruments that satisfy the one or more predetermined criteria; and

a chamber containing a supercritical fluid at a temperature and a pressure and for a duration sufficient to clean the substrates and not compromise the security features and the visual data of the secure instruments;

wherein the structure for holding secure instruments is capable of being disposed in the chamber so that the supercritical fluid circulates through and around the secure instruments to remove one or more substances into the supercritical fluid.

~~50~~40. The apparatus of claim ~~49~~39 further comprising an agitation mechanism for circulating the supercritical fluid through and around the secure instruments in the chamber.

5141. The apparatus of claim 4939 wherein the structure for holding the secure instruments comprises a tray.

5242. The apparatus of claim 4939 wherein the visual data comprises an image, authentication data, or both.

5343. The apparatus of claim 4939 wherein the one or more substances comprise contaminants, dirt, sebum, pathogens, or any combination of these.

5444. The apparatus of claim 4939 wherein at one of the one or more substances are soluble in the supercritical fluid.

5545. The apparatus of claim 4939 wherein to clean comprises to disinfect.

5646. The apparatus of claim 4939 wherein the supercritical fluid comprises $C0_2$.

5747. The apparatus of claim 4939 wherein the supercritical fluid further comprises an ionic liquid or another gas.

5848. The apparatus of claim 4939 wherein the supercritical fluid further comprises a trapping material for removing at least a portion of the one or more substances from the supercritical fluid.

5949. The apparatus of claim 4939 wherein the predetermined criteria comprises an acceptable level of tearing.

6050. The apparatus of claim 4939 wherein the predetermined criteria comprises an acceptable level of limpness.

6151. The apparatus of claim 4939 wherein the predetermined criteria comprises an acceptable level of graffiti.

6252. The apparatus of claim 4939 wherein the predetermined criteria comprises an acceptable level of soiling.

6353. The apparatus of claim 4939 wherein the predetermined criteria is whether the secure instrument is authentic.