

## What is Claimed:

1. A portable surgical visualization kit comprising:
  - a camera configured to capture images;
  - viewing equipment configured to receive and display the captured images;
  - 5 a processor coupled to the camera and the viewing equipment;
  - a stand configured to support the camera and the processor; and
  - a case configured to house the camera, the viewing equipment, the processor, and the stand.
2. The kit of claim 1, wherein the processor is configured to couple to the viewing  
10 equipment via a wireless connection.
3. The kit of claim 1, wherein the processor is configured to couple to the viewing equipment via a wired connection.
4. The kit of claim 1, further comprising:
  - a battery; and
  - 15 a light source;
  - wherein the case is further configured to house the battery and the light source; and
  - wherein the stand is further configured to support the battery and the light source.
- 20 5. The kit of claim 4, wherein the light source is a high luminosity light source configured to deliver at least one of coaxial light or collimated light.
6. The kit of claim 1, wherein the stand is configured to position the camera along three orthogonal axes and to rotate the camera about the three orthogonal axes.
7. The kit of claim 6, wherein the stand comprises:
  - 25 a base;
  - a first arm configured for attachment to the base;
  - a second arm configured for attachment to the camera; and
  - a rotatable elbow joint coupled between the first and second arms;
  - wherein at least one of the first and second arms is a telescoping arm.
- 30 8. The kit of claim 7, wherein the base, the first arm, the second arm, and the rotatable elbow joint are each configured for releasable assembly.
9. The kit of claim 1, further comprising an endoscope.
10. The kit of claim 1, wherein the camera is a three-dimensional camera with voice activated zoom and positioning
- 35 11. The kit of claim 1, wherein the case is dimensioned to comply with commercial airline carry-on luggage requirement.

12. The kit of claim 11, wherein the dimensions are 22 inches or less x 14 inches or less x 9 inches or less.

13. A portable surgical system comprising:

a battery;

5 a light source coupled to the battery;

a camera coupled to the battery, the camera configured to capture images;

viewing equipment configured to receive and display the captured images;

a processor coupled to the battery, the camera and the viewing equipment; and

a stand supporting the battery, the light source, the camera and the processor;

10 wherein the battery, the light source, the camera, the viewing equipment, the processor, and the stand are configured to be housed in a case.

14. The system of claim 13, wherein the processor is configured to couple to the viewing equipment via a wireless connection.

15 15. The system of claim 13, wherein the light source is a high luminosity light source configured to deliver at least one of coaxial light or collimated light.

16. The system of claim 13, wherein the stand is configured to position the camera along three orthogonal axes and to rotate the camera about the three orthogonal axes.

17. The system of claim 16, wherein the stand comprises:

20 a base;

a first arm configured for attachment to the base;

a second arm configured for attachment to the camera; and

a rotatable elbow joint coupled between the first and second arms;

wherein at least one of the first and second arms is a telescoping arm.

25 18. The system of claim 13, wherein the viewing equipment includes:

a headset; and

a visor coupled to the headset, the visor including optical loupes, digital loupes, and a light source.

30 19. A method for utilizing a portable surgical system to perform a surgery, the method comprising the steps of:

retrieving surgical components from a case, the surgical components including a camera, viewing equipment, a processor, and a stand;

assembling the retrieve surgical components into a surgical system;

positioning a patient within the surgical system for surgery;

35 configuring the surgical system; and

performing the surgery with the surgical system.

20. The method of claim 19, further comprising the step of:

reconfiguring the surgical system during the surgery via voice commands.

21. The method of claim 19, wherein the viewing equipment includes a headset and wherein the method further comprises the steps of:

reconfiguring the surgical system during the surgery via head gesture signals  
5 received from the headset.

22. The method of claim 19, further comprising the steps of:

disassembling the surgical system after the surgery; and  
placing the surgical components in the case, wherein the case is dimensioned to  
10 comply with commercial airline carry-on luggage requirement