CLAIMS

1. An imaging system comprising

a display system;

an image capture apparatus, arranged to capture a stereoscopic image of an operator work site (110; 210; 310; 410), in communication with the display system;

the display system arranged to receive and display said stereoscopic image on a display screen (100; 200; 300; 400) to said operator;

wherein the display screen is supported by a selectively movable frame (160) so as to be capable of selectively moving the display screen into and out of alignment of the operator's eyes and work site;

the image capture system comprises a pair of cameras (220, 221; 320, 321; 420, 421), arranged such that the difference in images captured by said cameras is consistent with the difference in images that would be captured by unassisted eyes;

said image capture system further comprises a mirror (250; 350; 450) corresponding to each camera, characterized in that the mirrors are arranged to direct the respective images to said corresponding cameras along paths (260; 360; 460) substantially parallel to the display screen.

2. The system according to claim 1, wherein said movable frame (160) comprises a resiliently deformable arm mounted between said frame and

an anchor point, said arm capable of deforming to a range of positions subject to the requirements of the operator.

3. The system according to claim 1, further comprising shutter glasses (130), worn by the operator and arranged to provide alternating images shown on the display screen (100; 200; 300; 400) to the operator.

4. The system according to claim 1, wherein the display screen (100; 200; 300; 400) displays the images directed in differing directions so as permit each image to correspond with the relevant eye.

5. The system according to claim 1, wherein said mirrors (250; 350; 450) are curved.

6. The system according to any one of the preceding claims, wherein the display system comprises two display screens (100; 200; 300; 400) so as to permit two operators working simultaneously within the work site (110; 210; 310; 410).

7. The system according to any one of claims 1 to 5, wherein the display screen alternates four images corresponding to two pairs of images so as to permit two operators working simultaneously within the work site (110; 210; 310; 410).

Claims:

~~1. An imaging system comprising~~

an image capture apparatus, arranged to capture a stereoscopic image of an operator work site, in communication with a display system;

the display system arranged to receive and display said stereoscopic image on a display screen to said operator;

wherein said display system is arranged such that the display screen is placed intermediate the operator's eyes and the work site.

2. The system according to claim 1, wherein the operator's eyes, the display screen and work space are aligned.

3. The system according to claim 1 or 2, wherein the display screen is supported by a selectively movable frame so as to be capable of selectively moving into and out of alignment.

4. The system according to claim 3, wherein said movable frame comprises a resiliently deformable arm mounted between said frame and an anchor point, said arm capable of deforming to a range of positions subject to the requirements of the operator.

5. The system according to any one of the preceding claims, wherein the image capture system includes a pair of cameras, the difference in images captured by said cameras consistent with the difference in image captured by the unassisted eye.

6. The system according to claim 5, wherein said image capture system further includes mirrors corresponding to each camera, for directing the respective ~~images to said corresponding cameras.~~

~~7. The system according to claim 5 or 6, further including shutter glasses, worn by~~ the operator and arranged to provide alternating images shown on the display screen to the operator.

8. The system according to claim 5 or 6, wherein the display screen displays the images from each camera directed in differing directions so as permit each image to correspond with the relevant eye.

9. The system according to any one of claims 1 to 3, wherein the image capture system includes a camera and two mirrors, said mirrors arranged to receive different images of said work site, and direct these to said camera, said camera arranged to output said images to said display device in an alternating sequence.

10. The system according to any one of claims 6 to 9, wherein said mirrors are curved.

11. The system according to any one of the preceding claims, wherein the display system includes two display screens so as to permit two operators working simultaneously within the work site.

12. The system according to any one of claims 1 to 10, wherein the display screen alternates four images corresponding to two pairs of images so as to permit two operators working simultaneously within the work site.

13. A method for displaying an image, comprising the steps of:
capturing a stereoscopic image of an operator work site;
communicating said image to a display system;
displaying said stereoscopic image on a display screen placed intermediate the operator's eyes and the work site.

14. The method according to claim 13, wherein the capturing step comprises ~~capturing two images using a pair of cameras, the difference in images captured~~

~~by said cameras consistent with the difference in image captured by the unassisted eye.~~