

Exemplary Patent Claims

The following are exemplary claims selected from each of the Avidasports patents as respectively indicated:

1. A method of positionally identifying people and objects within a defined space, the method comprising:

associating an identification generated for each person or object with a device to be worn or mounted while the person or object moves within the defined space;

controlling a beacon included within each device to emit a signal at an interval specified within a beacon transmission schedule;

controlling an instrument to record images representative of at least a portion of the defined space, each image plotting recorded signals within a two-dimensional field defined by a viewing angle of the instrument;

calculating image-based positional coordinates for each signal appearing within each of the captured images, the image-based positional coordinates defining spatial positioning of the beacons emitting the signals relative to the two-dimensional field of each image;

reducing the image-based positional coordinates to defined space-based positional coordinates, the defined space-based positional coordinates defining spatial positioning of the beacons emitting the signals within at least a two-dimensional coordinate system defined relative to at least a length and width of the defined space; and

for each of the images, identifying the person or object at each of the defined space-based positional coordinates based on the identification of the person or object scheduled to emit signals at the time the image was captured.

18. A locating system comprising:

a plurality of devices each having a beacon configured to emit a non-modulated signal at a fixed wavelength;

one or more instruments configured to take images of an area defined by a viewing angle of each instrument; a master station configured to wirelessly communicate a broadcast schedule to each of the plurality of device, the broadcast schedule specifying a period of time during which each beacon is to emit the non-modulated signal; and

wherein the master station is configured to generate positional coordinates for each beacon appearing within each of the pictures based on the beacon scheduled to emit the non-modulated signal at the time the image was taken and a position of the instrument taking the image.