

Sine roll angle = (Ax)/(A)

Sine pitch angle = (Ay)/(A)

I claim:

- 1. An apparatus for measuring the vertical displacement of a floating platform... 2. An apparatus as claimed in claim 1... 3. Apparatus as claimed in claim 1... 4. Apparatus as claimed in claim 3... 5. Apparatus as claimed in claim 4... 6. Apparatus as claimed in claim 4... 7. Apparatus as claimed in claim 4... 8. Apparatus as claimed in claim 4...

9. A method of compensating for the vertical displacement of a floating platform due to wave action said method comprising measuring the horizontal and vertical components of acceleration by means of three accelerometers arranged mutually perpendicular to each other to produce three accelerometer output signals, correcting the output signals for offsets by using a reference signal which takes the same operational path as the output signals, sampling said signals and passing said signals into a data processor for derivation of the vertical movement.

10. A method as claimed in claim 9 wherein the accelerometer output signals and the reference signal are digitised to produce digital signals representative of each of the three output signals and the reference signal, and then combining the four signals to produce a resultant signal representative of the vertical motion of the platform.

11. A method as claimed in claim 10 wherein the reference signal is subtracted from each of the three output signals to remove offsets and to provide corrected accelerometer output signals, the corrected accelerometer output signals each being squared, summing the squares of these corrected signals and taking the square root of the summation to arrive at a result that is representative of the vertical movement of the platform.

12. A method of determining the pitch and roll angle of a floating platform due to wave action, said method including measuring the horizontal and vertical components of acceleration by means of three accelerometers arranged mutually perpendicular to each other to produce three accelerometer output signals, correcting the output signals for offsets by use of a reference signal which takes the same operational path as the output signals and passing said signals into a data processor, wherein the pitch and roll angles are given by dividing the respective horizontal component of acceleration by the vertical component of acceleration, to obtain the sine value of said respective angle.

13. A method as claimed in claim 12 wherein the accelerometer output signals and the reference signal are digitised to produce digital signals representative of each of the three output signals and the reference signal, and then combining the four signals to produce a resultant signal representative of the vertical motion of the platform, wherein the reference signal is subtracted from each of the three output signals to remove offsets and to provide corrected accelerometer output signals, the corrected accelerometer output signals each being squared, summing the squares of these corrected signals and taking the square root of the summation to arrive at a result that is representative of the vertical movement of the platform.

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