

LICENSING OPPORTUNITY

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Wireless pressure sensors for optimized sail trimming

Keywords

Sail trimming, Real time monitoring, Wind speed, Atmospheric pressure, GPS, Acceleration, Digital control

Invention

During yacht sailing it is of high interest to trim the sails as accurate as possible and to sense small changes in wind immediately. With the presented invention the sailor can monitor the entire sail conditions at a glance, enabling highly optimized trimming conditions. Wind changes will be visible immediately, even at night. In the near future each crew member can wear a mobile device showing the most accurate sail trimming information. The presented invention has potential for fully automatic sail trimming in combination with the automatic pilot.



Fig. 1: A yacht equipped with wireless pressure sensors on luv and lee side. The connected solar cells enable independent wireless data transfer.

Features & Benefits

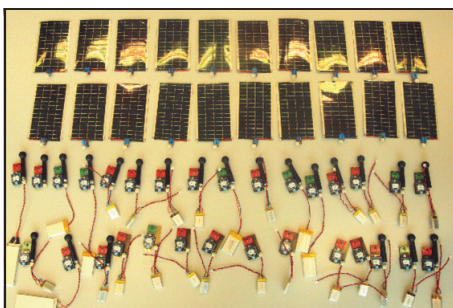
- Complete sail trimming information visible at a glance
- Any yacht can be upgraded with the sail trimming system
- Real time visualization on an on-board computer
- Enormous freedom of movement with future mobile device control
- Fully automatic sail trimming will be possible in the near future

Field of Application

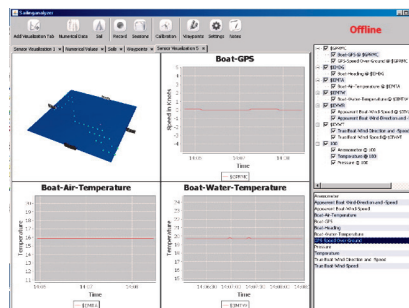
- Yacht sailing
- Paragliding, wind gliding, etc.

Patent Status

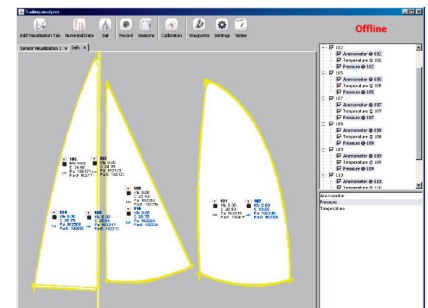
- Patent pending PCT



A



B



C

Fig. 2A: Prototype set of wireless pressure sensors for a yacht, each sensor is equipped with a small solar cell (size 10 x 4 cm); 2B: On board computer showing GPS, air and water temperature data; 2C: Additional data from the individual pressure sensors will be visualized on the on-board computer. Temperature, pressure and wind speed information will be combined accurately to optimize sail trimming.

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