

Title (en)  
SENSOR ARRANGEMENT AND METHOD FOR WATER QUALITY MONITORING

Title (de)  
SENSORANORDNUNG UND VERFAHREN ZUR WASSERQUALITÄTSÜBERWACHUNG

Title (fr)  
CONFIGURATION DE CAPTEURS ET PROCÉDÉ DE CONTRÔLE DE LA QUALITÉ DE L'EAU

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Application  
**EP 08875284 A 20081105**

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Abstract (en)  
[origin: WO2010051842A1] A sensor arrangement (1) and a method for the permanent remote monitoring of water quality in a water supply line (2) is disclosed. The sensor arrangement (1) comprises a number of sensors (3) for the detection of different attributes of water quality and for providing actual measurement data, a communicating unit (4) for sending the actual measurement data to a central controller (5), and a flow cell (6), which is equipped with a water inlet (7) and with a water outlet (8) that are accomplished to be connectable to a supply tube (9) and respectively to a delivering tube (10) of the water supply line (2). The sensor arrangement (1) according to the invention is characterized in that the flow cell (6) comprises a one-way water flow path (11) that links the water inlet (7) to the water outlet (8), wherein the sensors (3) are arranged one downstream of the other with respect to the water flow path (11) in such a way that their sensing parts (12), which interact with the flowing water, are located in or at least close to a central axis (13) of the water flow path (11) in each case. Also disclosed is a system for early detection of pollutants in a water distribution network (44). The system is based on a number of remote sensors (3) located throughout the water supply network (44). The sensors (3) communicate with each other using a self-organized wireless network, sharing data and control commands. The system enables water suppliers to detect contaminations the very minute they occur.

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