

Title: Design Thinking in Developing a New DP Reference Sensor

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The paper describes the development of a new DP reference sensor based on the implementation of a Design thinking process. Compared to traditional development processes based on a set of known requirements, Design thinking allows unknowns to be taken into account. This is useful when developing a product based on advanced and complex technology. To meet the challenge of what is unknown it is important to actively use ideation as a part of the process. An example of the outcome of ideation is using detector arrays rather than a single detector for the reflected laser beam. The Design thinking process has also been about connecting to the user community and the user environment. This has been done to avoid the “solution without a problem” syndrome. The user environment has been visited and observed by use of a multi perspective approach which has given valuable learning and insight. At some point it is necessary to enter into the disciplined phase of implementation and testing. This is the phase where the costs start to get substantial and risks carefully managed. Receiving the “Merket for god design” award in two categories, industrial design and interaction design, was an important encouragement but the final and most important judgement is going to be made by the users.