Mobile Agent architecture for intelligent Product to increase the effectiveness in End of Life Management

Abstract

Sweep the entire product lifecycle information from design to recycling is the great challenge to overcome in manufacturing worldwide. Actually, managing product after-sales information is a key to innovation and launching new products that meet the customers’ expectations. To address this objective, the current study proposes architecture for closing the product lifecycle information by using the emerging technologies (PEID) and Mobile Agent software. In this paper we focus on the End of Life (EOL), especially the after-sales stage. To this end, the proposed architecture aims enable product knowledge management (PKM) by gathering and analyzing product-related information after-sales and with the feedback to the previous phases for help actors to decision making process. Furthermore, we aim to enable the product data and knowledge management (PDKM). The proposed architecture uses the advent of hardware and software related to product identification technologies and multi-agent systems (MAS).
Mobile Agent architecture for intelligent Product to increase the effectiveness in End of Life Management

- S. Baïna, H. Panetto, K. Benali, A PRODUCT ORIENTED MODELLING CONCEPT Holons for systems synchronisation and interoperability, 8th International Conference on Enterprise Information Systems, ICEIS'06.
- J. Cassina, M. Tomasella, M. Marquard, A. Metin, A. Matta, M. Taisch, Development


- (DYNAMITE 2006) &quot;Dynamic Decisions in Maintenance (DYNAMITE)&quot; home page: http://osiris.sunderland.ac.uk/~cs0aad/DYNAMITE/Index.htm, accessed on 02/2012.


- Ambient Intelligence (AmI) Technology as Enabler for Improvement, available on:
Mobile Agent architecture for intelligent Product to increase the effectiveness in End of Life Management

http://www.ami4sme.org/
  - ASPIRE - The EU funded project that brings RFID to SMEs, available on: http://www.fp7-aspire.eu/
  - &apos;Coordination and support action for global RFID-related activities and standardisation&apos;, available on http://cordis.europa.eu/search/index.cfm?fuseaction=news.document&amp;N_RCN=30283
  - Customer in the Loop: Using Networked Devices enabled Intelligence for Proactive Customers Integration as Drivers of Integrated Enterprise available on: http://www.cuteloop.eu/


**Index Terms**

Computer Science  
Information Systems

**Keywords**

Product Lifecycle Management (plm)  
Multi-agent Systems (mas)  
Radio Frequency Identification (rfid)  
End Of Life  
Change Management  
Knowledge Management