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Challenges in Anti-Counterfeiting of Cyber-Physical Systems

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Abstract : This paper examines the system protection for cyber-physical systems (CPS). CPS are particularly characterized by their networking system components. This means they are able to adapt to the needs of their users and its environment. With this ability, CPS have new, specific requirements on the protection against anti-counterfeiting, know-how loss and manipulation. They increase the requirements on system protection because piracy attacks can be more diverse, for example because of an increasing number of interfaces or through the networking abilities. The new requirements were identified and in a next step matched with existing protective measures. Due to the found gap the development of new protection measures has to be forced to close this gap. Moreover a comparison of the effectiveness between selected measures was realized and the first results are presented in the paper.

Keywords : anti-counterfeiting, cyber physical systems, intellectual property (IP), knowledge management, system protection
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