Revista Product: Management & Development - PMD

Set of guidelines for conceptual design focusing on electrical safety of refrigerators

Darlan Princival Junior, Carlos Cziulik

Abstract: Very often, within Brazilian companies product design procedures, the verification and the product approval, considering the defined requirements stated at the beginning of the project, occur only in the late stages of product development just before starting the production. Therefore, any problem originated from non-conformities to the design requirements specification is only informed to the design team too late in the development process causing several hindrances from cost and schedule point of view. The aim of this research is to propose a set of guidelines for electrical safety in order to be applied during the conceptual design stage of domestic refrigerators supporting the product development team to take decisions for defining the conceptual solutions that comply with the design requirements from the beginning of the project statement. The aim of this research is to provide an approach that allows to reduce the reworks during and, mainly, at the final stages of the product development process. Thus, it is expected that the dimensioned and developed design solution will increase its likelihood of being approved in the final evaluation.

Keywords: electrical safety, design guidelines, household appliances.