

Title (en)
CONTROL OF A MACHINE

Title (de)
ANSTEUERUNG EINER MASCHINE

Title (fr)
COMMANDE D'UNE MACHINE

Publication
EP 2756361 A1 20140723 (DE)

Application
EP 11779378 A 20111028

Priority
EP 2011069048 W 20111028

Abstract (en)
[origin: WO2013060389A1] In order to enable an efficient abduction even for defective or insufficiently modelled observations, a relaxed abduction problem is proposed in order to explain the greatest possible part of the observations with the fewest possible assumptions. Thus, based upon two preference orders over a subset of observations and a subset of assumptions, tuples can be determined so that the theory together with the subset of assumptions explains the subset of observations. Due to the formulation as multi-criteria optimisation problem it is no longer necessary for assumptions made and observations explained to be offset against one another. On the basis of the formal validity of the approach certain characteristics of the set of results (such as correctness, completeness, etc.) can be checked, which is advantageous particularly in safety-critical applications. By means of the choice of underlying representational language and the preference relations the complexity of the problem-solving process is influenced and thus flexibly adapted with regard to domain requirements. The invention may be used for any machines, e.g. gas turbines or steam turbines.

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