

Title (en)
SAFETY ANALYSIS FRAMEWORK

Title (de)
SICHERHEITSANALYSERAHMEN

Title (fr)
CADRICIEL D'ANALYSE DE SÉCURITÉ

Publication
EP 4034439 A4 20231101 (EN)

Application
EP 20870046 A 20200917

Priority

- US 201916586838 A 20190927
- US 201916586853 A 20190927
- US 2020051271 W 20200917

Abstract (en)
[origin: WO2021061488A1] Techniques for determining a safety metric associated with a vehicle controller are discussed herein. To determine whether a complex system (which may be uninspectable) is able to operate safely, various operating regimes (scenarios) can be identified based on operating data and associated with a scenario parameter to be adjusted. To validate safe operation of such a system, a scenario may be identified for inspection. Error metrics of a subsystem of the system can be quantified. The error metrics, in addition to stochastic errors of other systems/subsystems can be introduced to the scenario. The scenario parameter may also be perturbed. Any multitude of such perturbations can be instantiated in a simulation to test, for example, a vehicle controller. A safety metric associated with the vehicle controller can be determined based on the simulation, as well as causes for any failures.

IPC 8 full level
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Citation (search report)

- [XYI] US 2017286570 A1 20171005 - KIM BAEKGYU [US], et al
- [Y] US 2018336297 A1 20181122 - SUN XING [US], et al
- [Y] US 2017132334 A1 20170511 - LEVINSON JESSE SOL [US], et al
- See references of WO 2021061488A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
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DOCDB simple family (application)
US 2020051271 W 20200917; CN 202080066048 A 20200917; EP 20870046 A 20200917; JP 2022519120 A 20200917