

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)
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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