

Title (en)

AN INTEROPERABLE EXTENSIBLE SYSTEM FOR THE GENERATION OF VERIFIED SOFTWARE CODE

Title (de)

INTEROPERABLES ERWEITERBARES SYSTEM ZUR ERSTELLUNG EINES VERIFIZIERTEN SOFTWARECODES

Title (fr)

SYSTÈME EXTENSIBLE INTEROPÉRABLE POUR GÉNÉRER UN CODE DE LOGICIEL VÉRIFIÉ

Publication

**EP 3482292 A1 20190515 (EN)**

Application

**EP 17749209 A 20170706**

Priority

- GB 201611967 A 20160708
- GB 2017051996 W 20170706

Abstract (en)

[origin: WO2018007822A1] A system for generating verified software code from an original model of a system under development (SUD) is described, where the original model expresses the SUD in terms of components, structural behaviour between components (and overall behaviour of the SUD). The system comprises: a plurality of modelling language adaptors arranged in parallel to receive the original model of the SUD and to convert the original model into a transformed model expressed in a common language, each modelling language adaptor being configured to convert an original model written in a specific modelling language into the transformed model expressed in the common language such that the system can generate verified code from the original model written in any of a plurality of different modelling languages; a model verifier for mathematically verifying if the transformed model satisfies at least one of its specified requirements and if the transformed model does not, generating verification analysis data expressing how the at least one specified requirement is not met; and a code generator for generating executable code from the transformed model once the model verifier has mathematically verified the transformed model as satisfying the at least one of its specified requirements.

IPC 8 full level

**G06F 9/44** (2018.01); **G06F 11/36** (2006.01)

CPC (source: EP)

**G06F 8/35** (2013.01); **G06F 8/355** (2013.01); **G06F 11/3604** (2013.01)

Citation (search report)

See references of WO 2018007822A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2018007822 A1 20180111**; EP 3482292 A1 20190515; GB 201611967 D0 20160824

DOCDB simple family (application)

**GB 2017051996 W 20170706**; EP 17749209 A 20170706; GB 201611967 A 20160708