

Title (en)

SOLVING NP-COMPLETE PROBLEMS WITHOUT HYPER POLYNOMIAL COST

Title (de)

LÖSUNG VON NP-VOLLSTÄNDIGEN PROBLEMEN OHNE HYPERPOLYNOMISCHE KOSTEN

Title (fr)

RÉSOLUTION DE PROBLÈMES NON DÉTERMINISTES POLYNOMIAUX COMPLETS SANS COÛT HYPER POLYNOMIAL

Publication

**EP 3123302 A4 20171220 (EN)**

Application

**EP 15768263 A 20150325**

Priority

- US 201461970291 P 20140325
- US 2015022377 W 20150325

Abstract (en)

[origin: WO2015148599A1] Within satisfaction problems or any decision or other problem which is reducible to a satisfaction problem, the invention tracks the paths along which implications propagate and identifies conditional contradictions and subsequently moves the contradictions back down the implicational paths toward assumptions or other unreasoned assertions in order to expel the contradictions. The action is completed in less time than is incurred by existing methods and thus provides a performance improvement to the devices, software, or processes which address such problems. Such problems are addressed by devices, software, and processes related to many technical fields, including: ore refining; pipeline routing; yarn manufacture; fabric cutting; sawyering; mechanical component design; structural design of data processing systems; design and analysis of circuits or semiconductor masks; inspection and guarding of containers, pipes, and galleries; sensor array operations; orbital satellite operations; data compression; chemical analysis; design and analysis of proteins.

IPC 8 full level

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CPC (source: EP IL KR)

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**G06F 2111/06** (2020.01 - EP)

Citation (search report)

- [A] WO 2009097290 A2 20090806 - GILLESPIE CLAYTON [US]
- [A] US 2011161266 A1 20110630 - GILLESPIE CLAYTON [US]
- See references of WO 2015148599A1

Cited by

US10528868B2

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)

**WO 2015148599 A1 20151001**; AU 2015236144 A1 20161103; AU 2015236144 B2 20200430; CA 2943044 A1 20151001;  
CA 2943044 C 20230516; CN 105745618 A 20160706; EP 3123302 A1 20170201; EP 3123302 A4 20171220; IL 247866 A0 20161130;  
IL 247866 B 20210531; JP 2017513076 A 20170525; JP 6550384 B2 20190724; KR 102341689 B1 20211220; KR 20160136270 A 20161129;  
MY 184777 A 20210421; SG 11201606976P A 20160929

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MY PI2016703394 A 20150325; SG 11201606976P A 20150325