

Title (en)

Method and apparatus for assembling building shell elements

Title (de)

Verfahren und Vorrichtung zum Zusammenbauen von Rohbauelementen

Title (fr)

Procédé et appareil pour assembler des éléments de coques de construction

Publication

EP 2354074 A1 20110810 (EN)

Application

EP 11000780 A 20110201

Priority

SI 201000033 A 20100201

Abstract (en)

Automated assembly of building shell (comprised of facades, roofs, dividing walls and ceilings) in connection with building from phase of design to phase of erection, comprising all phases of optimized assembly of building shell. In particular, the assembly of sandwich panels onto metal sub-frame, said sub-frame being carrying member of roofs and facades is disclosed. This system can be used in way of analogy for assembly of glass facades and other elements of building shell where the basic element is finished enough to have it directly mounted or attached or otherwise incorporated into building shell. An automated assembly, positioning elements of a building shell in correct sequence onto a correct position into the building shell is disclosed. A method for automated assembly using a robot working in the outside environment without direct involvement of assembly workforce is further disclosed. This method provides for tracking ability and is essentially automated.

IPC 8 full level

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CPC (source: EP)

B66C 1/0212 (2013.01); **B66C 1/0243** (2013.01); **B66C 1/0262** (2013.01); **B66F 9/181** (2013.01)

Citation (search report)

- [XII] US 2006133917 A1 20060622 - CLARK JEFFREY A [US], et al
- [XII] US 5984623 A 19991116 - SMITH SCOTT R [US], et al
- [XII] US 5015145 A 19910514 - ANGELL MICKEY A [US], et al
- [XAI] GB 2268536 A 19940112 - WURTH PAUL SA [LU], et al
- [A] WO 2008133974 A2 20081106 - PACE INNOVATIONS L C [US], et al
- [A] WO 2004028754 A1 20040408 - CONSEJO SUPERIOR INVESTIGACION [ES], et al

Cited by

CN112645203A; CN117172622A; EP4249418A1; WO2020088726A1; WO2017157482A1; US10329126B2; WO2023180051A1; WO2017003282A1

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Designated extension state (EPC)

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