

Title (en)  
COLLAPSIBLE STRUCTURE CONVERTIBLE TO A LOAD-SUPPORTING DEVICE

Publication  
**EP 0263628 A3 19890315 (EN)**

Application  
**EP 87308547 A 19870928**

Priority  
IL 8023686 A 19861006

Abstract (en)  
[origin: EP0263628A2] Various structures, such as a stair, bridge, table, ladder, or stretcher can be folded to a compact configuration for transportation and/or storage but rapidly extended for deployment as a rigid, load-bearing device. The structures include a plurality of rows of rigid plates (1) hinged together about mutually perpendicular axes. If all of the plates are in a common plane and a force is applied perpendicular to the hinge axes, the plates can fold up to a compact form. When one or more of the rows of plates is swung perpendicular to a further row of hinged plates, the configuration becomes rigid and capable of supporting a load.

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**F16B 5/00; F16S 3/04**

IPC 8 full level  
**A47C 19/12** (2006.01); **A47B 3/00** (2006.01); **A61G 1/013** (2006.01); **E01D 15/12** (2006.01); **E04C 2/40** (2006.01); **E04C 3/00** (2006.01); **E04G 5/08** (2006.01); **E06C 1/52** (2006.01)

CPC (source: EP)  
**A47B 3/00** (2013.01); **A47C 19/126** (2013.01); **A61G 1/013** (2013.01); **E01D 15/124** (2013.01); **E04C 2/405** (2013.01); **E04C 3/005** (2013.01); **E06C 1/52** (2013.01); **A47B 2230/0096** (2013.01)

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