

Title (en)  
Folding apparatus

Title (de)  
Falzapparat

Title (fr)  
Appareil de pliage

Publication  
**EP 0415077 B1 19970108 (DE)**

Application  
**EP 90114234 A 19900725**

Priority  
US 40163889 A 19890831

Abstract (en)  
[origin: JPH03106755A] PURPOSE: To form a plurality of folds in a sheet material at high speed by providing a driving means for continuously moving the sheet material through folding means without stopping during formation of first, second and third folds on first, second and third folding means. CONSTITUTION: A fold 32 extending along the path of movement of a sheet material is formed by a first folder assembly 72. Next, a fold 34 extending in the direction perpendicular to the moving direction of the sheet material is formed by a second folder assembly 78. Finally, a fold 36 extending along the path of movement of the sheet material is formed by a third folder assembly. While the sheet material is folded by the folder assemblies 72, 78 and 86, the sheet material is continuously moved by a driving means through the folder assemblies 72, 78, 86 without being stopped.

IPC 1-7  
**B65H 45/12; B41F 13/54**

IPC 8 full level  
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CPC (source: EP US)  
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**B65H 45/22** (2013.01 - EP US); **B65H 2301/42142** (2013.01 - EP US)

Cited by  
EP2281766A1; DE102015101813A1; EP1334940A1; CHT01620A1; WO0056651A1; US6497643B1; US6544160B1; WO9947445A1;  
WO9947446A1; US6929710B1; US7066368B1; US6705499B1; US6821240B1

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CA 2024377 C 19950117; CN 1021217 C 19930616; CN 1054947 A 19911002; DE 59010627 D1 19970220; JP 2695977 B2 19980114;  
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