

Title (en)  
Connecting element

Title (de)  
Verbindungselement

Title (fr)  
Élément de connexion

Publication  
**EP 0863220 B1 20000816 (DE)**

Application  
**EP 97810129 A 19970306**

Priority  
EP 97810129 A 19970306

Abstract (en)  
[origin: EP0863220A1] A fastener (especially a screw or rivet), for fastening components of aluminium, magnesium and their alloys, consists of an AlZnMgCu type aluminium alloy of composition (by wt.) 6.0-8.0% Zn, 2.0-3.5% Mg, 1.0-3.0% Cu, 0.05-0.30% Zr, NOTGREATER 0.30% Cr, NOTGREATER 0.50% Mn, NOTGREATER 0.10% Ti, NOTGREATER 0.20% Si, NOTGREATER 0.20% Fe, NOTGREATER 0.05% each ( NOTGREATER 0.15% total) of other elements, balance Al and impurities. Also claimed is a process for producing the above fastener by casting to a billet, homogenisation annealing, compressing to a starting material, solution annealing, quenching, cold forming to fasteners and thermally hardening, in which recovery annealing is carried out at 180-260 degrees C for 5 secs. to 120 mins. prior to cold forming.

IPC 1-7  
**C22C 21/06**; **C22F 1/053**

IPC 8 full level  
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CPC (source: EP)  
**C22C 21/06** (2013.01); **C22F 1/053** (2013.01)

Cited by  
WO2020148140A1; WO2020099174A1; EP1241275A4; FR2809780A1; KR20210078537A; CN113302327A; EP2638989A4; EP1707827A1; DE102005014606A1; US6267684B1; US9534282B2; KR20210046733A; CN112996935A; JP2022512876A; WO0013817A1; WO0027559A1; US9249823B2; US9957999B2; US11879166B2; EP3833794B1

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