

Title (en)  
CRANE

Publication  
**EP 0234451 B1 19901227 (DE)**

Application  
**EP 87102071 A 19870213**

Priority  
DE 3605324 A 19860219

Abstract (en)  
[origin: US4782961A] A crane is provided which comprises a hoisting mechanism, which comprises a hoisting rope and a hoisting rope winch. A winch drive for the hoisting rope or a torque-limiting coupling connected between said winch drive and said winch is so controlled that in a period of time which preferably exceeds one second to the rope-pulling force exerted on the hoisting rope is increased in steps or continuously to a value which corresponds to the weight of the load or is sufficient to hoist the load, and that the winch is adapted to be rotated in a payout sense by opposing forces which tend to pull the hoisting rope from the winch and which exceed the instantaneous rope-pulling force.

IPC 1-7  
**B66D 1/52**

IPC 8 full level  
**B66D 1/52** (2006.01)

CPC (source: EP US)  
**B66D 1/52** (2013.01 - EP US); **Y10S 254/90** (2013.01 - EP US)

Cited by  
AT389292B

Designated contracting state (EPC)  
AT BE CH DE ES GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0234451 A2 19870902; EP 0234451 A3 19880601; EP 0234451 B1 19901227**; AT E59367 T1 19910115; CA 1309384 C 19921027; DE 3766976 D1 19910207; DK 164032 B 19920504; DK 164032 C 19920921; DK 83087 A 19870820; DK 83087 D0 19870218; FI 870699 A0 19870219; FI 870699 A 19870820; NO 171718 B 19930118; NO 171718 C 19930428; NO 870645 D0 19870218; NO 870645 L 19870820; US 4782961 A 19881108

DOCDB simple family (application)  
**EP 87102071 A 19870213**; AT 87102071 T 19870213; CA 530025 A 19870218; DE 3766976 T 19870213; DK 83087 A 19870218; FI 870699 A 19870219; NO 870645 A 19870218; US 1641187 A 19870219