

Title (en)

A composite return spring for heddles of jacquard, verdol and similar type textile looms.

Title (de)

Doppelspannfeder für die Weblitzen einer Jacquard, Verdol oder ähnlichen Webmaschine.

Title (fr)

Ressort de rappel composite pour les lisses de métiers jacquard, verdol ou similaires.

Publication

EP 0533636 A1 19930324 (EN)

Application

EP 92830489 A 19920915

Priority

IT MI912440 A 19910916

Abstract (en)

A composite return spring for heddles of textile looms, consisting of two helical springs (1,2) made of steel wire which are connected in series to each other and have different lengths and cross sections, the wire of the shorter spring (1) having a cross section 5 to 50% larger than the wire of the longer spring (2). <IMAGE>

IPC 1-7

D03C 3/40; **D03C 3/44**

IPC 8 full level

D03C 3/40 (2006.01); **D03C 3/44** (2006.01)

CPC (source: EP)

D03C 3/40 (2013.01); **D03C 3/44** (2013.01)

Citation (search report)

- [A] US 1794911 A 19310303 - LIVERMORE HOMER F
- [A] FR 2529587 A1 19840106 - MARSANDE TISSAGES P [FR]
- [A] DE 2651057 A1 19780511 - SCHNITZLER & VOGEL
- [A] EP 0292632 A2 19881130 - CREAZIONI TESSILI BORSA DI CES [IT]

Cited by

EP0678603A1; FR2718810A1; US5819809A

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EP 0533636 A1 19930324; **EP 0533636 B1 19941228**; DE 69201039 D1 19950209; DE 69201039 T2 19950518; ES 2066593 T3 19950301; IT 1251322 B 19950508; IT MI912440 A0 19910916; IT MI912440 A1 19930317

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