

Title (en)
Compressed-air column, cushioned and turning, particularly suitable for office chairs

Title (de)
Gasdruckfeder, insbesondere für Bürostühle

Title (fr)
Ressort pneumatique, notamment pour chaises de bureau

Publication
EP 0891727 A2 19990120 (EN)

Application
EP 98112532 A 19980707

Priority
IT BO970435 A 19970717

Abstract (en)
The column is comprised of an assembly with cylinder (1) and piston (3), the piston being integral with one end of the stem (5), the free ends of the cylinder and of the stem prearranged with a suitable conical shape for the coupling with correspondent seats of the chair base and seat. The stem is crossed by a control rod (18) cooperating with a drawer valve (29), which intercepts the communication between the pressure chambers (A-B) of the cylinder-piston assembly, the chambers containing compressed air under low pressure. The column is equipped with means (32, 37) which stop the extension travel of its stem (5) within such limits that the volume and the length of the pressure chamber with the smaller section (B) do not decrease below predetermined minimum values, which ensure for the assembly the maintenance of the necessary features of bending strength and which prevent cavitation phenomena when the column is suddenly loaded by the weight of the person sitting down. According to a preferred form of embodiment, the cylinder (1) has a constant diameter the whole of its length and it is coated with a tubular jacket (1=) whose lower end (101=) is shaped into a cone for the coupling with the seat of the chair base. <IMAGE>

IPC 1-7
A47C 3/30

IPC 8 full level
A47C 3/30 (2006.01)

CPC (source: EP)
A47C 3/30 (2013.01)

Citation (applicant)
• EP 0357595 A1 19900314 - EBERSPAECHER J [DE]
• EP 0462997 A1 19920102 - LIFTER SRL [IT]
• IT 1262248 B 19960619 - LIFTER SRL

Cited by
CN113123042A; EP3001932A1; US7673941B2; WO2016050286A1; WO2006058272A3

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