

Title (en)

FOUR-WHEEL-DRIVE AUTOMATIC SWIMMING POOL CLEANER

Title (de)

AUTOMATISCHER SCHWIMMBECKENREINIGER MIT VIERRADANTRIEB

Title (fr)

DISPOSITIF AUTOMATIQUE DE NETTOYAGE DE PISCINE A QUATRE ROUES MOTRICES

Publication

EP 1290298 A4 20040407 (EN)

Application

EP 00941156 A 20000526

Priority

US 0014771 W 20000526

Abstract (en)

[origin: WO0192664A1] A four-wheel pool cleaner (20) motivated by water flow to move along a pool surface, and having: a body (24); the four wheels rotatably mounted thereon and including two sets of two wheels (22) each, one wheel of each set on each side; a drive mechanism (36) in position to be moved by water flow and having a rotatable drive member (76); a drive train extending to the first wheel set (22a, b) and to the second wheel set (22c, d), to drive all four wheels. Preferred embodiments include: wheel-to-wheel drive links (88) along the side; a turbine (36) as drive mechanism; a pair of spaced wheelgears (32, 34), preferably integrally formed with the wheel, facilitating drive linkages and steering; a pair of end-to-end drive shafts (80, 82) joined by a coupler (84c), one shaft end (80a) being a ball joint allowing fore-and-aft movement of a drive-shaft distal end; a spring (102) and cam (100) for alternately moving that distal end between a driving position engaging one of the spaced wheelgears (32), and a steering position engaging the other of the spaced wheelgears (34); wheel treads (108) with radial fingers (110), some (110a-c) of longer length; and a segmented articulated skirt (56) to help enclose a plenum beneath the pool cleaner.

IPC 1-7

E04H 4/16

IPC 8 full level

E04H 4/16 (2006.01)

CPC (source: EP)

E04H 4/1654 (2013.01)

Citation (search report)

- [XA] EP 0565226 A1 19931013 - LESLIE PHILLIP [US]
- [XA] US 5172445 A 19921222 - CHANDLER MICHAEL J [GB]
- [A] EP 0323883 A1 19890712 - LIBERTY POOL PROD [CH]
- [A] US 5933899 A 19990810 - CAMPBELL SANFORD F [US], et al
- [A] US 5245723 A 19930921 - SOMMER PETER [CH]
- See references of WO 0192664A1

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