

Title (en)  
Knife sharpener.

Title (de)  
Messerschleifgerät.

Title (fr)  
Aiguiseur à couteaux.

Publication  
**EP 0349017 A2 19900103 (EN)**

Application  
**EP 89116670 A 19850311**

Priority  
US 58879584 A 19840312

Abstract (en)  
A method and apparatus for sharpening knives, blades, and the like utilizing a rotating displaceable abrasive disk where the abrading force on the knife cutting edge facet in parallel contact with the surface of the disk perpendicular to its axis of rotation is controlled by a biasing means such as a spring or equivalent, the position of the cutting edge facet on the disk is established by two appropriate stops contiguous to the disk and the angle between the principal plane of the disk and the face of the knife is controlled precisely so as to accommodate knives of different thickness and shape. Magnetic means to control the angle are claimed. Methods and apparatus include sequential steps that utilize one or more orbiting abrasive surfaces together with an abrasive disk sharpener where in each step there is a guide, preferably magnetic, to control the sharpening angle and where the angle is progressively greater in those sharpening steps where the orbiting abrasive elements are employed. Also claimed are means in a disk sharpener to prevent accidental contact of the face of the blade with the moving abrasive surface.

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**EP 0349017 A2 19900103; EP 0349017 A3 19901205; EP 0349017 B1 19940302**; AT E102111 T1 19940315; AT E56645 T1 19901015; AU 3971985 A 19850919; AU 577838 B2 19881006; BR 8501077 A 19851029; CA 1256292 A 19890627; CA 1275809 C 19901106; DE 3579712 D1 19901025; DE 3587769 D1 19940407; DE 3587769 T2 19940929; EP 0154967 A2 19850918; EP 0154967 A3 19861001; EP 0154967 B1 19900919; IL 74576 A0 19850630; IL 74576 A 19880131; JP H02160462 A 19900620; JP H0661684 B2 19940817; JP H0741528 B2 19950510; JP S618266 A 19860114; KR 850010622 U 19851230; KR 930007147 Y1 19931013; NZ 211349 A 19870731; ZA 851702 B 19851030

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