

**CROSS-REFERENCE ART COLLECTIONS**

1           **MOBILE ROBOT**

**FOREIGN ART COLLECTIONS**

FOR       **CLASS-RELATED FOREIGN DOCUMENTS**

- 2           **ARM MOTION CONTROLLER**
- 3            .Teaching system
- 4            ..Manual lead through
- 5            ..Machine driven lead through
- 6            .Communication with another machine
- 7            ..Conveyor
- 8            ..Robot
- 9            .Closed loop (sensor feedback controls arm movement)
- 10          ..Sensor physically contacts and follows work contour
- 11          ..Mechanically actuated present limit
- 12          ..Cam
- 13          ..Limit switch
- 14          **ARM MOVEMENT (SPATIAL)**
- 15          .Jointed arm
- 16          ..Cartesian (X-Y-Z arm)
- 17          ..Cylindrical
- 18          ..Spherical
- 19          **DRIVE SYSTEM FOR ARM**
- 20          ..With provision for altering speed of driven element
- 21          ..Flaccid drive element
- 22          ..Fluid motor
- 23          ..Electric motor
- 24          ..Stepper motor
- 25          ..Gearing
- 26          ..Including bevel gear
- 27          **ARM PART**
- 28          ..Joint
- 29          ..Wrist
- 30          **END EFFECTOR**
- 31          ..Gripping jaw
- 32          ..Servo-actuated
- 33          ...Tactile sensor
- 34          ...Force feedback
- 35          ...Proximity
- 36          ..Actuating means

- 37          ...Fluid motor
- 38          ...Electric motor
- 39          ..Jaw structure
- 40          ..Vacuum or mangetic
- 41          ..Tool
- 42          ..Welding
- 43          ..Spray painting or coating
- 44          ..Inspection
- 45          ..Compliance
- 46          **SENSING DEVICE**
- 47          ..Optical
- 48          **COUNTERBALANCE**
- 49          **PROTECTIVE DEVICE**
- 50          **MISCELLANEOUS**

