

Fabrication of Solar Powered Auto Charging Grinding Machine(Prototype)

J.Sebastian Joyal/Assistant professor/MECH

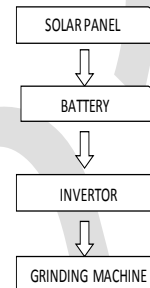
S.Madhanmurugan,G.Mohanraj,P.Inigorithish

I.G.C.E College of Engineering,Trichy

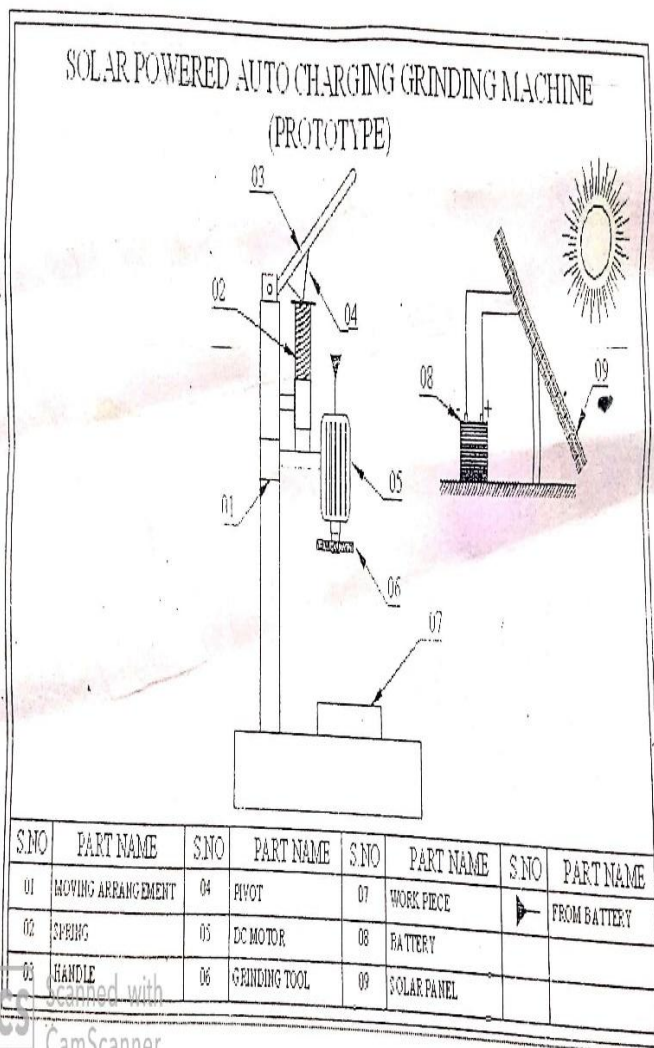
gmohanraj2001@gmail.com nalinmadhan806@gmail.com,inigorithish@gmail.com

II.BLOCK DIAGRAM

Abstract: In this concept we have designed the solar powered grinding machine. The solar powered automatic grinding machine is useful equipment for industries because we are generating the power from direct sunlight with help of solar panel. This is the nonconventional method we are using here to run the grinding machine. So this equipment can save the electric power during grinding process in industries.



I.PROPOSED SYSTEM



III.COMPONENTS

- Solar panel
- Battery
- Inverter
- Grinding wheel
- Motor

IV.METHODOLOGY

It consist of grinding wheel, solar pannel, battery, motor etc... The grinding wheel fixed on the motor shaft.The battery, solar pannel and grinding wheel arrangement's are mounted on assembly box.The solar pannel generates the power supply from direct sunlight.Then the generated energy stored in the batteries.The store energy in the battery is used to run the motorThe grinding wheels are fixed at the motor shaft.The motor shaft rotates the grinding wheel.The handle based with spring arrangement to move the grinding wheel up and down.

V:ADVANTAGES

- 1.Cheapest method
- 2.Usage of solar energy
- 3.Low power consumption
- 4.Available source

VI:DISADVANTAGES

- 1.Solar energy only available in day time
- 2.Need maintenance
- 3.Solar energy storage is expensive

VII:APPLICATION

- 1.Used small scale industries
- 2.Pattern shops
- 3.Lathe workshop for make surface finish in specimens