WHAT IS CLAIMED IS:

1. A grinding apparatus comprising:

a holding table for holding a workpiece thereon;

a grinding unit including a grinding wheel for grinding the workpiece held on said holding table, said grinding wheel including a top surface, a bottom surface and an outer peripheral surface extending between said top surface and said bottom surface, said bottom surface of said grinding wheel including a grinding stone made of abrasive grains and grains of photocatalyst bonded by a vitrified bonding material;

a grinding water supply unit configured to supply grinding water to said grinding stone when the workpiece held on said holding table is ground by said grinding unit; and

a light applying unit disposed adjacent to said holding table and a grinding surface of said grinding stone on said grinding wheel, said light applying unit configured to apply light to said grinding surface of said grinding stone prior to said grinding surface contacting the workpiece on said holding table.

2. The grinding apparatus according to claim 1, wherein said light applying unit is positioned immediately before a point where said grinding wheel starts to go onto the workpiece held

on said holding table on a path along which said grinding wheel rotates about its own axis.

3. The grinding apparatus according to claim 1, wherein said light applying unit includes a light emitter for emitting said light and a cleaning water supply for supplying cleaning water to said light emitter.

4. The grinding apparatus according to claim 1, wherein said light applying unit includes a plurality of light emitters.

5. The grinding apparatus according to claim 4, wherein said light applying unit includes a base including said plurality of light emitters, and a transparent cover on said base that is positioned over said plurality of light emitters.

6. The grinding apparatus according to claim 1, wherein said light applying unit includes a cleaning water supply and ejection ports for ejecting the cleaning water, said ejection ports being narrow slits formed in said light applying unit.

7. The grinding apparatus according to claim 1, wherein said light applying unit includes a cleaning water supply and ejection ports for ejecting the cleaning water, said ejection ports being round holes formed in said light applying unit.

8. The grinding apparatus according to claim 1, wherein said light applying unit includes a cleaning water supply and an

ejection port for ejecting the cleaning water, said ejection port being a narrow slit formed in said light applying unit.