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APPLICANT NAME	**Dr. S. Pradeep kumar**
TITLE OF INVENTION	RECOVERY PROCESS OF METALS FROM PRINTED CIRCUIT BOARDS (PCBS) USING ALKALIPHILE (NITROBACTER SP.)
FIELD OF INVENTION	METALLURGY
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(57) Abstract :

The present invention relates to a process for recovering metals from PCBs using Alkaliphile (Nitrobacter Sp.) bacteria, comprising the steps of ; initiating the recovery process of at least five metals using Alkaliphile (Nitrobacter Sp.) bacteria; adding broken pieces of a predefined amount of PCBs dosage to the culture medium; allowing the bacteria to react with the five metals in the PCB; initiating acidolysis reaction to release H+ in the cultured medium containing energy / no energy source; generating H2SO4- acid by the bioleaching process; reacting the acid with the metal / (s) and followed by bioleaching mechanism; and computing bleaching efficiency of metals for C4 and at S/L ratios using several parameters including pH, temperature, relative humidity, oxidation reduction potential (ORP) and others.

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