Patent Search

Invention Title	A SYSTEM AND A MICROMACHINING PROCESS USING COW URINE (GAU-MUTRA)
Publication Number	46/2018
Publication Date	16/11/2018
Publication Type	INA
Application Number	201811040311
Application Filing Date	25/10/2018
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	CHEMICAL
Classification (IPC)	B81C1/00492

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Abstract:

The present invention is related to micromachining in electrochemical discharge machining (ECDM) process using non-toxic, non-corrosive, nonhazardous, economic biodegradable electrolyte (11). The present invention is particularly related to a system (10) and method (20) for micromachining in electrochemical discharge machir using cow urine as electrolyte (11). Cow urine is used as an electrolyte (11) in ECDM process and proved successful for material removal at micro level. As one of the e of the present invention, the glass which is hard, brittle and non-conductive material was machined by ECDM process when cow urine (Gau-mutra) is used as an elec

Complete Specification

FIELD OF INVENTION

The present invention is related to 5 machining in the area of newer machining methods. This invention is more focused towards micromachining. The present invention is related to particular hybrid machining process such as Electro Chemical Discharge Machining process (ECDM). The present invention comprises a development of a system and a method for micromachining in 10 electrochemical discharge machining process. The novelty in present invention is related to use of non-toxic, non-corrosive, non-hazardous, economical and biodegradable electrolyte. The all above qualities were achieved by the use of cow urine (Gau-Mutra) as electrolyte in electrochemical discharge machining process.

15 BACKGROUND & PRIOR ART

Electro Chemical Discharge Machining (ECDM) process is well known for a person skilled in the nonconventional or newer manufacturing processes. ECDM process has combined characteristic of Electro Chemical Machining 20 (ECM) and Electric Discharge Machining (EDM) that enables to machine

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