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(19) 세계지식재산권기구
국제사무국



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- (72) 발명자: 겸
- (71) 출원인: 주성호 (JOO, Sung Ho) [KR/KR]; 서울시 광진구 광장동 110번지 학산오피스텔 1106호, 143-802 Seoul (KR).
- (74) 대리인: 특허법인 이노 (INNO PATENT LAW FIRM); 서울시 서초구 서초동 1699-3번지 신한국빌딩 8층, 137-883 Seoul (KR).

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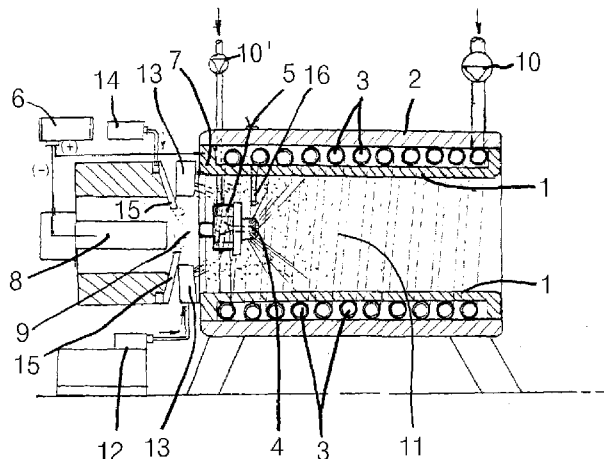
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(54) Title: BURNER USING PLASMA

(54) 발명의 명칭 : 플라즈마를 이용한 버너

[Fig. 1]



(57) Abstract: The present invention relates to a burner using plasma, which uses a mixture fuel in which water and industrial waste oil are mixed at an appropriate ratio. A combustion tank has a positive electrode (+), a rod installed at one side of the combustion tank has a negative electrode (-), and direct current electricity is supplied to the combustion tank and to the rod from a direct current electricity supply unit. A steam supply pipe of a steam generator is installed together with a plasma torch unit which is coupled to the combustion tank, such that high-temperature steam is discharged from the steam supply pipe together with the plasma torch generated by the plasma torch unit. Thus, the high-temperature plasma torch generates a high-temperature plasma flame of 800°C or higher to heat a combustion chamber at the inner wall of the combustion tank. A mixture fuel supply pipe is wound into a coil on the outer surface of the combustion chamber, such that the mixture fuel supply pipe is preheated by high-temperature heat. The mixture fuel in the mixture fuel supply pipe is supplied at an air pressure of 50 through a high pressure pump, and water in the mixture fuel is decomposed into hydrogen and oxygen and waste oil in the mixture fuel is decomposed into carbons. The mixture fuel is injected or sprayed through a nozzle at a high temperature to effectively and completely burn the mixture fuel. The plasma torch unit operates by means of the direct current electricity supplied by the direct current electricity supply unit if needed, to adjust the temperature of the combustion chamber of the combustion tank, thereby enabling the smooth use of the burner.

(57) 요약서:

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