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(72) Inventors; and

(71) Applicants : **BOTMA, Jetze** [NL/NL]; De Faert 40, NL-9222 NT Drachster Compagnie (NL). **KLEEFSTRA, Martijn** [NL/NL]; Kouwe 5, NL-9103 PE Dokkum (NL). **VAN DER ZEE, Tino Walter** [NL/NL]; Opfeart 5, NL-8637 VD Wiuwert (NL).

(74) Agent: **JANSEN, C.M.**; Johan de Wittlaan 7, NL-2517 JR Den Haag (NL).

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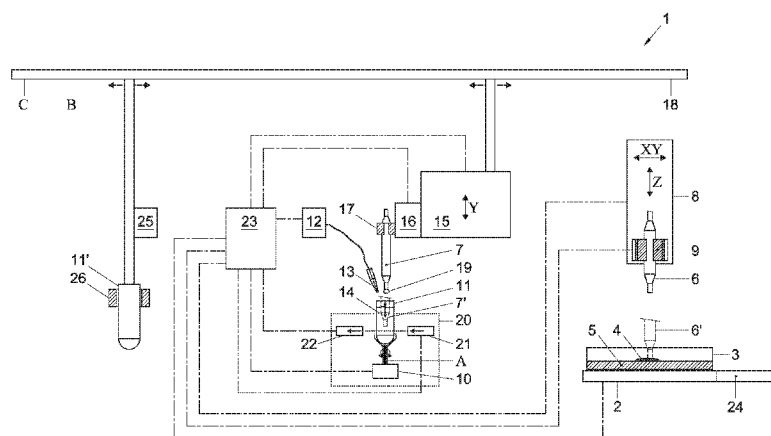


Fig. 1

(57) Abstract: A method and apparatus for locating and selecting a colony of microorganisms on a culture dish and identifying microorganisms in said selected colony using MALDI. The method comprises the automated steps of locating and selecting a colony of microorganisms on a culture dish; obtaining a sample of said selected colony of microorganisms; depositing at least some of said sample of said selected colony of microorganisms on a target plate; and transferring said target plate with said sample in an apparatus for performing MALDI for identification of said sample of said selected colony of microorganisms. A sample of a colony of microorganisms is automatically deposited on a depositing spot such that the sample covers at most approximately half of said one of the depositing spots of the target plate. A suspension of a sample of microorganisms is automatically prepared by automatically picking the sample with a picking tool and submerging the picking tool with said sample in a suspension, after which the picking tool is vibrated in vertical sense only to release the sample from the picking tool.