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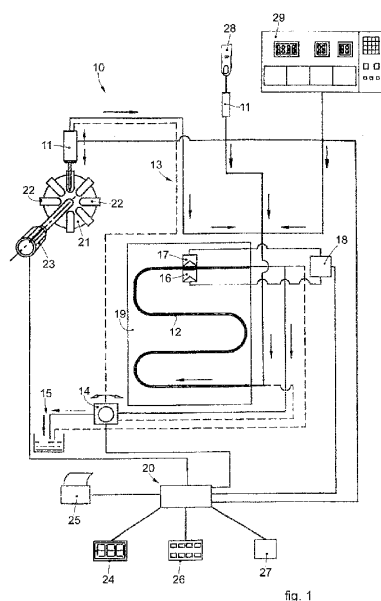
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(54) Title: APPARATUS AND METHOD TO DETERMINE ERYTHROCYTE SEDIMENTATION RATE AND OTHER CON-
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(57) Abstract: Apparatus and corresponding method used, in the field of medical analysis, to determine erythrocyte sedimentation rate, as well as other connected parameters, said apparatus comprising: a sampling member (11) to take the blood sample to be analyzed disposed in test tubes (22); - a pipe (12) inside which the blood sample is able to be introduced, transparent to electromagnetic radiations in a field comprised between 100 and 2000 nm; - a circuit (13) that connects said sampling member (11) to said pipe (12) and inside which the blood sample circulates; - a pump (14) associated with said circuit (13) and cooperating with means to create an air bubble between two successive blood samples; - a discharge pipe (15) to discharge the blood sample after the analysis; - a measuring instrument comprising a radiation emitter device (16) associated with a mating detector device (17), together defining a measuring zone; - a control and processing unit (20) able to manage the functioning of said apparatus, and - an interface unit (18) by means of which said devices

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(16 and 17) are connected to said control and processing unit (20), wherein said pump (14), with each measuring cycle, is configured to take a quantity of blood in a range from 30 microliters to 180 microliters, and wherein said measuring instrument is configured to perform the measurement on a quantity equal to about 1 final microliter of said initial sample quantity, the apparatus also comprising means (23) to make the test tubes (22) rotate or tilt before the sampling in order to perform programmed mixing cycles of the blood contained in the test tubes (22), wherein said sampling member comprises means (11, 11 a) to take the blood sample from the test tubes (22) both oriented with the stopper facing upward and also oriented with the stopper facing downward.