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- (71) 申请人: 南京岚煜生物科技有限公司 (LANSION BIOTECHNOLOGY CO., LTD.) [CN/CN]; 中国江苏省南京市江宁区科学园乾德路 6 号, Jiangsu 211100 (CN)。
- (72) 发明人: 许行尚 (XU, Xingshang); 中国江苏省南京市江宁区科学园乾德路 6 号, Jiangsu

- 211100 (CN)。 陈·杰弗瑞 (CHEN, Jeffery); 中国江苏省南京市江宁区科学园乾德路 6 号, Jiangsu 211100 (CN)。 陈亚宝 (CHEN, Yabao); 中国江苏省南京市江宁区科学园乾德路 6 号, Jiangsu 211100 (CN)。
- (74) 代理人: 南京华讯知识产权代理事务所 (普通合伙) (NANJING CIPIC INTELLECTUAL PROPERTY FIRM (GENERAL PARTNERSHIP)); 中国江苏省南京市江北新区研创园江淼路 88 号腾飞大厦 B 座 20 层 2004 室, Jiangsu 210031 (CN)。
- (81) 指定国 (除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK,

(54) Title: MICROFLUIDIC BLOOD TYPE TEST CHIP

(54) 发明名称: 一种微流控血型检测芯片

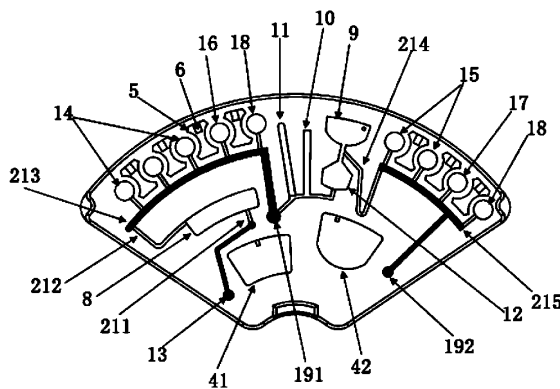


图 2

(57) Abstract: A microfluidic blood type test chip. The chip comprises a chip body (2), which comprises a forward typing blood type identification area and a reverse typing blood type identification area, wherein the forward typing blood type identification area is provided with a first sample injection chamber (41), a quantitative uniform-mixing chamber (8), a forward typing reaction chamber and a first air hole (191); the reverse typing blood type identification area is provided with a second sample injection chamber (42), a quantitative separation chamber, a reverse typing reaction chamber and a second air hole (192); a sample is injected into the first sample injection chamber (41), and the sample and a preset diluent in the first sample injection chamber (41) enter the quantitative uniform-mixing chamber (8) through a micro-channel; after being uniformly mixed in the quantitative uniform-mixing chamber (8), the sample and the diluent enter the forward typing reaction chamber and react with a reaction reagent, so as to be tested; and a sample is

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LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX,
MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL,
PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL,
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根据细则4.17的声明:

- 发明人资格 (细则4.17(iv))

本国际公布:

- 包括国际检索报告 (条约第21条(3))。

injected into the second sample injection chamber (42), the sample enters the quantitative separation chamber through a micro-channel, the sample is separated in the quantitative separation chamber, and separated blood plasma enters the reverse typing reaction chamber and reacts with a reaction reagent, so as to be tested. By means of the microfluidic blood type test chip, forward and reverse typing blood type identification can be realized at the same time, such that a blood type identification result is more accurate.

(57) 摘要: 一种微流控血型检测芯片, 该芯片包括芯片本体 (2), 芯片本体 (2) 包括正定型血型鉴定区和反定型血型鉴定区, 正定型血型鉴定区设第一进样腔 (41)、定量混匀腔 (8)、正定型反应腔和第一透气孔 (191); 反定型血型鉴定区设第二进样腔 (42)、定量分离腔、反定型反应腔及第二透气孔 (192); 第一进样腔 (41) 注入样本, 第一进样腔 (41) 内样本和预设稀释液经微流道入定量混匀腔 (8); 样本与稀释液在定量混匀腔 (8) 中混匀后, 入正定型反应腔与反应试剂反应以待检测; 第二进样腔 (42) 注入样本, 经微流道入定量分离腔, 样本在定量分离腔内被分离, 分离出的血浆入反定型反应腔与反应试剂反应以待检测。该微流控血型检测芯片能够实现正、反定型血型鉴定同时进行, 使血型鉴定结果更加准确。