

METHOD AND DEVICE FOR ANALYSIS OF DRUGS OF ABUSE ON KERATIN MATERIAL



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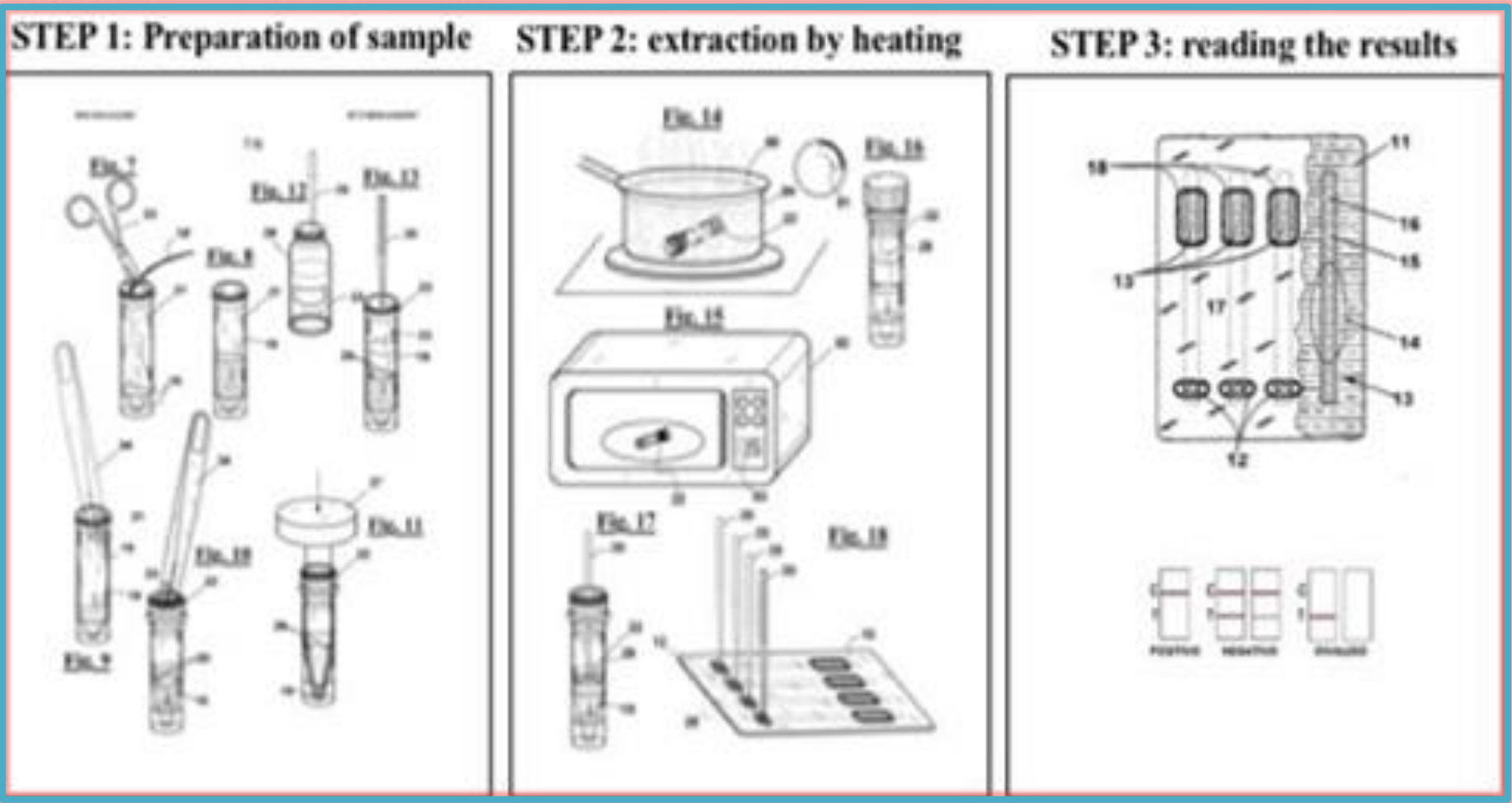
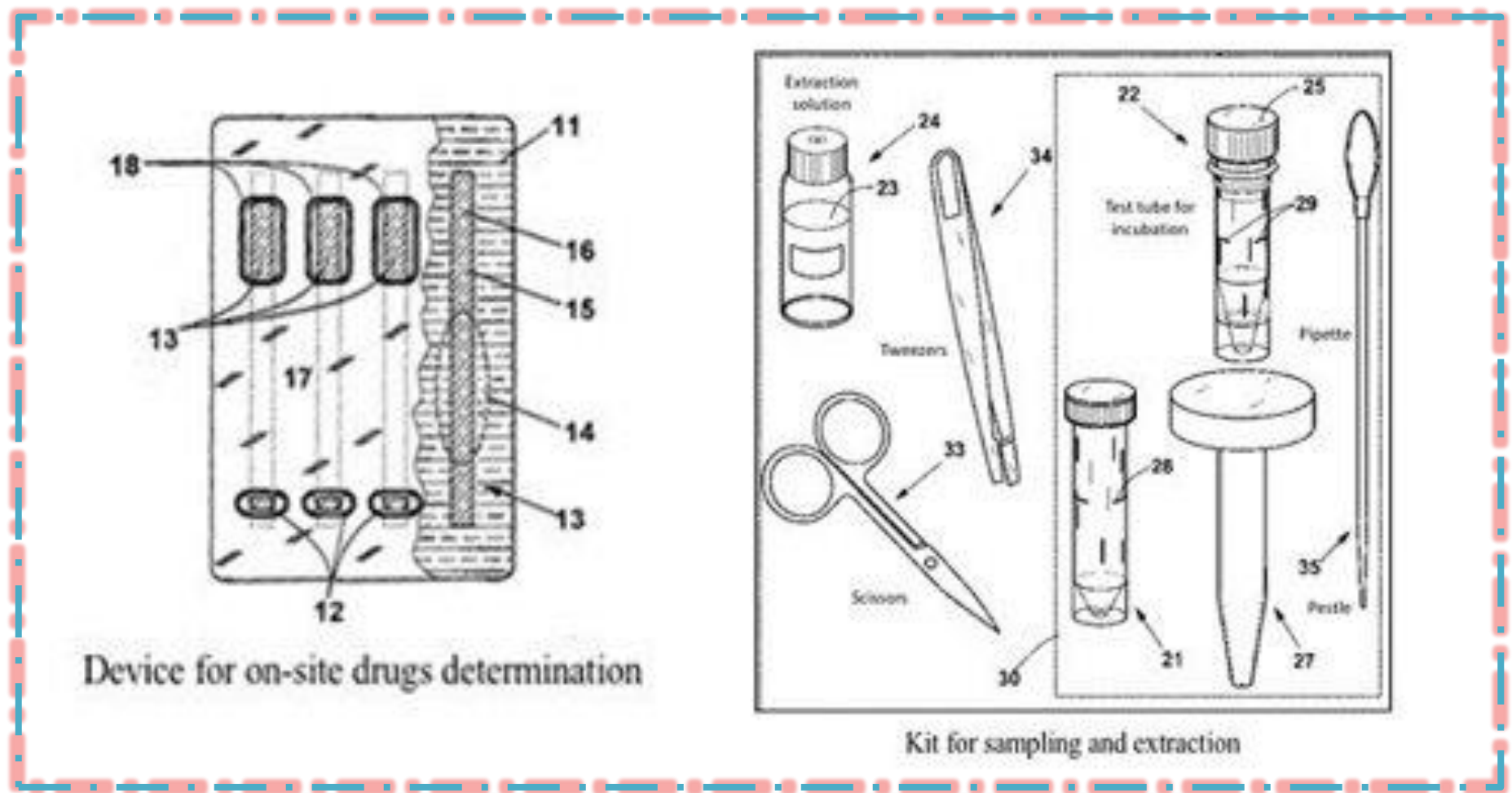
Invention



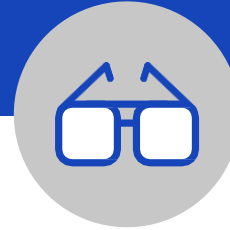
The invention consists of an **extracting solution for keratin material incubation**. The extract, obtained by heating the solution in a really short time, is then analyzed by an on-site immunometric device for the **determination of drugs of abuse**. As result, the method provides the presence or the absence of the abuse substances from little amount of hair.

The amount of material needed is about 30 mg per analysis, which can allow the identification of a number of substances that varies depending on the type of "on-site" immunometric kit used. Since the procedure involve a simple method and totally non-toxic materials employed, the test can be **used by unskilled personnel**, while maintaining **high reliability**, and **disposed of in household waste**.

Drawings
& pictures



Industrial applications



The invention relates to the development of a kit that allows the **determination of drugs on keratin matrix** (hair, hair adnexa) by an immunometric method; The method can also be used at home by unskilled personnel.

The system consists of an extraction solution with which a minimal amount of material is incubated, and the results obtained are highly reliable and usable for 1st Level screening.

The kit, already set up, is easy to use for:

- **monitoring on drug use/abuse in domestic settings;**
- **toxicological analysis** at health care facilities or private laboratories as 1st Level screening.

Possible developments



The proposed kit and the extractive solution displayed to have **high reliability, low set-up costs** of the entire kit, made of **non-hazardous materials** that can be disposed of in household waste. The kit is, furthermore, very easy to use by non-specialized personnel (families, laboratories not specialized in the field of drug of abuse toxicology, etc.). The **ease of use** is complemented by the **low invasiveness** of the proposed method, as it does not involve the use of blood or urine sampling, but rather the use of hair.

The research team is interested to undertake collaboration agreements with industrial partners and considering licensing or transferring the patented invention for commercialization by interested companies.

For more information:



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