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LICENSING OPPORTUNITIES

Fondazione IRCCS
Istituto Nazionale dei Tumori

Sistema Socio Sanitario
Regione Lombardia

APPARATUS AND METHOD FOR STORING A HUMAN BREATH SAMPLE

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Applications:
- Apparatus and method applicable to large multicenter studies of biomarker discovery and into clinical practice for diagnosis or personalized medicine.
- Long term storage of samples allows longitudinal analysis and comparison of samples before and after any type of treatment.
- Method suitable also for environmental, agriculture and veterinary applications or to any application involving the controlled storage of a gas sample for analytical purposes.

Key benefits:
- Collection of breath in suitable, simple and tiny sterile long term storage system.
- Protection from contamination by external agents.
- Release of the stored breath via an easy-to-implement system into the designed analytical apparatus for its analysis through a device able to offer a controlled release of the content.

Offer:
- Licensing out.
- Co-Development.

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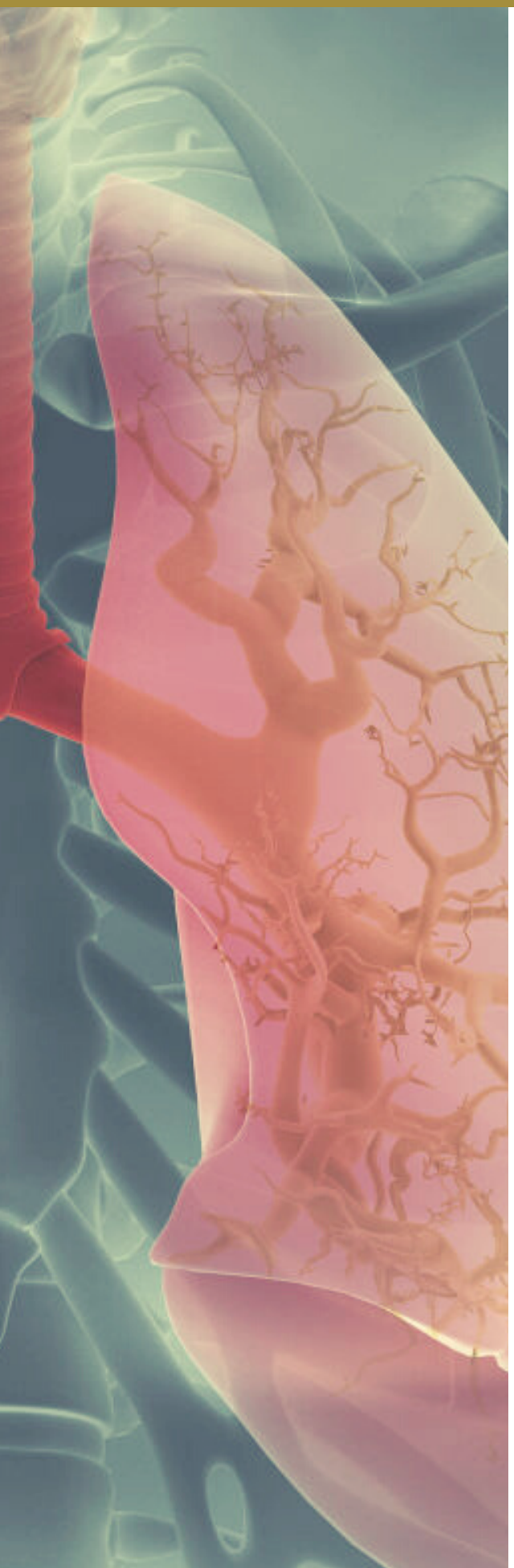

APPARATUS AND METHOD FOR STORING A HUMAN BREATH SAMPLE

INVENTION

The invention enable stable and long-term storage of a whole sample of human breath, minimizing the phenomena of contamination and decay of the sample itself.

BACKGROUND

Acquisition and profiling of samples of human breath constitutes a potential tool for clinical diagnostics in so far as human exhalation may contain various chemical species indicative of onset of pathological conditions. The validity of the analyses of breath lies primarily in the simple sampling which is carried out in an altogether non-invasive way. A problem inherent to any sample of human breath is the instability of the sample itself, and currently it can be stored only in a temporary way in the same container used for sampling. Moreover, the human breath long-term conservation is difficult and sampling containers are not able to ensure sealing to avoid exit of gas over a long time, so that it is necessary to carry out the analysis immediately after sampling.

TECHNOLOGY

The invention consists in a system storing the whole human breath sample that includes a storage device and procedures particularly suitable for clinical practice. Breath analysis is a field in dramatic development and in the next years it will be developed for diagnosis and follow-up of many pathologies, especially cancer. Our solution has the advantage of being independent of analytical technology; it is applicable to any analytical platform as our device stores the whole breath sample that can be entirely used or fractionated for subsequent further analysis.

INVENTORS

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INTELLECTUAL PROPERTY RIGHTS

Patent application filed in Italy.
Patent pending in Europe, China-Hong Kong, USA.

OFFER

Licensing out & co-development.

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