

Bio-Matrix Integration and development of biometrics technologies in a unified platform for Antemortem and Post Mortem identification of populations

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The Bio matrix concept has been developed following all the law enforcement, first responders and forensic guidelines of the international bodies regarding the identification of Ante mortem (live) and Post mortem (deceased) populations.

The concept emanates from the disparate sources and methodologies used by many governmental agencies as well as medical practitioners which are the population base to be used in order to accurately with the integration of the existing biometrics systems (fingerprint, facial, DNA, iris, signature, dental and cranial reconstruction techniques).

In order to achieve such a daunting task, a comprehensive research and audit require to be performed in each of the laboratories, in order to create a matrix in which biographical, morphological, descriptive and analytical data from an individual that are currently used by most of the forensic and crime investigation units in the world.

The inclusion of other forensic investigative processes such as dental forensics and cranio-facial reconstruction, provides a challenge since in most development countries the construction of national databases, is nonexistent, therefore taking into consideration that the solution also integrates modules for the capture and standardization of such disparate data sources disseminated within the country.

The solution considers that from any biometrical source available a comprehensive search can be initiated in order to find the identity of a deceased individual in case of criminal nature, as well as for victims of natural disasters, the investigative process, under this automated comprehensive matrix, will allow for the investigator to perform complete identification hour in hours instead of days or weeks, depending on the condition of the sample(s) obtained from the subject.

A productizable solution has been developed, in order to achieve a seamless process in each of the agencies (International, national, state and municipal)

Biography

Victor H Rocha has completed his B.S. at the age of 21 years from Escuela Superior d Agricultura "Hermanos Escobar" and I studies from California State University , Fresno, CA. He is the director of Applied Biometrics at QuarkSoft. He has published more than 10 papers for several Intelligence, and National Health and Security organizations throughout the world. Implementations of Geospatial and biometrics (forensic and civil) in United States, Mexico, Guatemala, Costa Rica, Russia, Colombia, Brasil and Argentina.

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