

Datasheet of the IKTA4/088 project

I. *Equipment for the recognition of original handwriting and signature identification*

Project start: January 1, 2002, duration: 17 months.

Amount of support: KHUF 70 800, total project cost: KHUF 141 600.

Project leader: **Tóth Edit**

Grafológiai Intézet Kft.

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Project URL: <>

II. Consortium members (number of members = 3, the first member is the project co-ordinator)

<i>no</i>	<i>name</i>	<i>support</i>	<i>total cost</i>
1.	Institute of Graphology Co., Ltd.	KHUF 28 000	KHUF 56 000
2.	Hexium Technical Development Co., Ltd.	KHUF 27 800	KHUF 55 600
3.	Budapest Polytechnic, John von Neumann Faculty of Informatics, Inst. for Applied Informatics	KHUF 15 000	KHUF 30 000

III. Public presentations

No presentation is available.

IV. Goals of the project

Recognition of the Original Handwriting and Signature- Identifying Device

Summary of public information on the project plan

Development of the signature identifying device

1. Purpose

The importance of signature is beyond any question, signature being the authentic way of identification. In everyday practice (credit card payments, cheques, invoices, contracts, tenders, etc) recognition, identification of signatures is performed by individuals who do not possess the necessary expertise, acquirable only after several years of study and practice. At present there is no computer-based device that would help (quick and easy) signature identification in everyday practice.

The project aims the development and system integration of a tool that would help computer supported automated signature identification.

2. Tasks to be accomplished

- Incorporation of partial tasks supported earlier by various software, in one single system (entry of signature, digitalisation, noise filter, algorithmisation, data- processing).
- Creation of an independent device with ample degree of mobility, which in addition to the tasks listed above, also has the capacity to be connected to the central database.
- In the course of the expertise procedure, evaluation of computer grapho-metric parameter data is performed with human interference. This, in the framework of present project, is done through an automated process, thus a schedule must be developed whereby the device:
 - sets up a knowledge base from the available signatures
 - evaluates the computer grapho-metric parameters (weight, personality dependence coefficient, establishes the filter to be used)

- updates knowledge base with new signatures that enter the system
- renders and classifies level of similarity

3. Methods to be used

Entry of signatures is performed according to previous methods. Digitalisation, noise filtering, algorithmisation, however, is done with newly developed methods.

4. Planned solution

In the course of the automated identification process, the device reads the signature that has to be identified, compares it with the same person's signatures in the database (more identification samples are required, because of the variance of signatures encountered at the same individual). On the basis of the analysis of the computerised grapho-metric parameters and on the basis of comparison of the results obtained, the analysed signature is listed in one of the following three

V. Project results (in case of finished projects)

The project is not finished.

VI. Data on consortium members (number of members = 3)

1. *Institute of Graphology Co., Ltd.* (co-ordinator)

URL: <>

Support for the co-ordinator: KHUF 28 000, and its total cost: KHUF 56 000.

Contract number: .

Team leader: **Tóth Edit**

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2. *Hexium Technical Development Co., Ltd.*

URL: <<http://www.hexium.hu>>

Support for the consortium member: KHUF 27 800, and its total cost: KHUF 55 600.

Contract number: .

Team leader: **Ladányi Péter**

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3. *Budapest Polytechnic, John von Neumann Faculty of Informatics, Inst. for Applied Informatics*

URL: <<http://www.bmf.hu>>

Support for the consortium member: KHUF 15 000, and its total cost: KHUF 30 000.

Contract number: .

Team leader: **Kutor László**

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