The industrial intellectual property

- **Patents**
- **Industrial Design**
- **Trademarks**
- **Plant varieties**
Patent for Industrial Invention
Patent for Industrial Invention

• **New inventions** that involve an **inventive step** and are capable of having an **industrial application** may be the subject of an invention patent.

• Discoveries, scientific theories and mathematical methods, plans, principles and methods for intellectual activities, for games or for commercial activity (*business method*), computer programs, methods for surgical or therapeutic treatment of the human or animal body and the methods of diagnosis applied to the human or animal body, are not regarded as inventions.
Types of patents

• **Physical entities:** products and substances

• **Activities:** uses and processes (special cases: product-by-process and software patents)

• **Product, substance, use and process provided that the inventive unit is not violated**
Patent requirements

- **novelty**: invention not included in the state of the art, i.e. everything that is accessible to the public;
- **originality**: which is not evident from the state of the art to a person expert in the field (*problem-solution approach*).

Priority searches

- **EPO**: //worldwide.espacenet.com
- **WIPO**: //patentscope.wipo.int/search/en/search.jsf
Patent requirements

- **industriality**: that its object can be manufactured or used in any kind of industry, including agriculture;
- **lawfulness**: not contrary to public order or morality;
- **sufficient description**: the invention must be described in a sufficiently clear and complete way for every person skilled in the art to implement it and must be distinguished by a title corresponding to its object (as opposed to *industrial secrecy*).
Effects of patenting

• granting of exclusive rights pursuant to the Code of industrial property;

• duration **20 years** from the date of filing of the application, **non-renewable**.
Rights arising from patenting

• exclusive implementation of the invention and fruition of the relative profit;

• prohibition to third parties to produce, use, market, sell or import for these purposes the invented product or process.
Events that extinguish the patent

Forfeiture for:
• non-payment of rights;
• starting from the time of non-payment.

Nullity for:
• lack of requirements;
• extension of the object of the patent beyond the content of the initial application;
• inexistence of the owner's right to obtain it, in the absence of a claim;
• \textit{ab origine}. 
Contents of a patent

• Title and summary
• Comments on the state of the art
• Improvements made by the invention
• Brief summary of the invention
• Detailed description of at least one embodiment (with reproducible examples in the case of a chemical or biotechnological patent)
• Culture deposit of the microorganism at the collection center (in case of biotechnological patent)
• CLAIMS
Patent protection

- **Scope**: defined by the claims, which can be interpreted with description and drawings
- **Protection**: against counterfeiting (direct and by equivalents)
Descrizione dell'Invenzione Industriale avente per titolo:
"Zainetto dotato di mezzi di tenuta interni"
a nome: SEVEN S.p.A., di nazionalità italiana, con sede in viale Italia 73 - 10040 LEINI' (TO).
Depositata il al n.

DESCRIZIONE

KNAPSACK EQUIPPED WITH INTERNAL HOLDING MEANS
The present invention refers to a knapsack, in particular of the type adapted to contain books and school material or other types of material, equipped with internal holding means for such books and material.

Knapsacks used for school and entertainment are nowadays more and more widely spreaded due to the comfort and ease of handling that they provide to their users for transporting various types of objects, leaving their hands free.

Since such knapsacks are used in the majority of times for transporting books and school material (in addition obviously to other types of material), problems occur due to their weight, that can sometimes be excessive with respect to the person wearing them, but above all that is often scarcely balanced inside the knapsack itself. Such problem of a scarce balancing of the transported loads is particularly felt when the users are children or boys: their body structure, in fact, is reduced with respect to the one of an adult user, and the presence of high internal unbalanced loads brings about a displacement of the barycenter for the child/boy + knapsack assembly towards the outside of the user body. Such barycenter displacement on one hand compromises the person's balance, and on the other hand is harmful for his or her health, since it obliges the user to curve his or her back forwards to re-establish such a posture as to bring back the barycenter itself into a balance position.
CLAIMS

1. Knapsack (1) for transporting material (2), characterised in that it is equipped with internal holding means (9) for such material (2), said internal holding means (9) enabling a minimum displacement of the final balancing barycenter of a user when said user wears said knapsack (1).

2. Knapsack (1) according to Claim 1, characterised in that said internal holding means (9) are of the elastic type.

3. Knapsack (1) according to Claim 2, characterised in that said internal elastic holding means (9) are composed of at least one band of elastic material secured to a first part of an internal side (8) of said knapsack (1), said side (8) in a second part thereof that is opposite to said first part being in contact with a user back when the user wears said knapsack (1).

4. Knapsack (1) according to Claim 3, characterised in that the bands made of elastic material are two and are mutually crossed so as to be shaped as an"X".
A portable reader (1) for smart cards (7) is described that comprises: a support body (3) containing at least one slot (5) for inserting and reading a smart card (7); interface means (9) connected to the support body (3); interface means (9) connected to the support body (3); means (13) for keeping and aligning the smart card (7); and a managing microprocessor contained inside the support body (3) and connected to the interface means (9) and the reading means for smart cards (7).

Fig. 1
A device (1) is described to authenticate a user in an Internet environment, comprising: a support structure (3); a terminal (5) for the connection to a processor port; a microprocessor circuitry to perform safety functions and cryptography algorithms; and activation means (7) to allow enabling an authentication code. A system and a process are further described to input a PIN inside the device (1) and a system and a process to authenticate a user based on such device (1).
A process is disclosed for retrieving information in large heterogeneous data bases, wherein information retrieval through visual querying/browsing is supported by dynamic taxonomies; the process comprises the steps of: initially showing (F1) a complete taxonomy for the retrieval; refining (F2) the retrieval through a selection of subsets of interest, where the refining is performed by selecting concepts in the taxonomy and combining them through Boolean operations; showing (F3) a reduced taxonomy for the selected set; and further refining (F4) the retrieval through an iterative execution of the refining and showing steps.
TIME POP


References Cited

U.S. PATENT DOCUMENTS
1,146,351 Schlueger 7/1915
1,146,779 Jesseret 7/1931
2,745,244 Niess 5/1956
4,286,756 Drake 5/1981

Primary Examiner—Vit Miska
Attorney, Agent, or Firm—Melvin L. Crane Agent

ABSTRACT

A novelty candy holding device which is in combination with a stop watch and a beeper. The stop watch can be activated and deactivated by a start/stop button/switch, when the stop watch is stopped, the start/stop button/switch activates a circuitry to a beeper and the beeper beeps until the reset button of the stop watch is pressed to reset the digital display to zeros and at the same time to inactivate the beeper.

14 Claims, 2 Drawing Sheets
sequence listing-loma linda
SEQUENCE LISTING

<110> Loma Linda University
ESCHER, Alan P.
Li, Fengchun

<120> Substances for Preventing and Treating Autoimmune Diseases

<130> 14102-1PCT
<140> to be assigned
<141> 2003-08-06

<150> US 60/401,652
<151> 2002-08-06

<150> PCT/US03/24625
<151> 2003-08-06

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<170> PatentIn version 3.2

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<213> Homo sapiens

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480

Pagina 1
National Patent
(Italian)

Features

- Filing of English translation of the claims
- Research procedure carried out by EPO with results within 10 months from the filing date
- Issue of a non-binding validity opinion by EPO
- Exam procedure in front of UIBM
- No administrative opposition procedure
Patent conventions: European and International Patent

• **Duration**: 20 years from the filing date

• **Renewal**: NOT renewable

• **Scope**: defined by the claims, which can be interpreted with description and drawings

• **Protection**: against counterfeiting (direct and by equivalent)
European patent

Features

• Unified search procedure
• Unified examination procedure
• Administrative opposition procedure
• Filing of the translation of the text granted in the designated countries
• EU member countries + European economic area
International patent

Features:

• Unified search procedure
• Possible Preliminary Examination
• No administrative opposition procedure
• Worldwide patent "reservation" valid for 30 - 31 months from filing
• 153 Countries adhering up to June 16, 2020
PCT adhering countries
Patent for Utility Model

• New models designed to give particular effectiveness or ease of application or use to machines, or parts of them, tools, utensils or objects of use in general, such as new models consisting of particular conformations, arrangements, configurations or combinations of parts, can be the subject of a utility model patent.
Discipline of the utility model

- Protection offered as a patent;
- No research and examination report by EPO
- **Duration**: 10 years, non-renewable.
New plant varieties

Object of rights:
A plant group of a botanical taxon (grouping of real organisms distinguishable from others and recognizable as a systematic unit) of the lowest known degree that fulfills the requirements of:

• Novelty
• Homogeneity
• Distinction
• Stability

The new plant variety must be designated with an appropriate denomination (UPOV – International Union for the Protection of New Varieties of Plants)
New plant varieties

Requirements:

**Novelty**: the variety is considered novel when at the date of filing of the application the reproductive or vegetative multiplication material, or a product of the harvest of the variety, has not been commercialized for over a year in the national territory and for over four years or, in the case of trees and vines, for over six years, in any other country.
New plant varieties

Requirements:

**Homogeneity**: the variety is considered homogeneous when it is sufficiently uniform in its pertinent and relevant characteristics.
New plant varieties

Requirements:

**Distinction**: the variety is considered distinct when it is clearly distinguished from any other variety whose existence, at the filing date of the application, is well known.
New plant varieties

Requirements:

Stability: the variety is considered stable when the pertinent and relevant characters remain unchanged following subsequent reproductions or multiplications.
New plant varieties

Procedure for filing:

The application must contain the following information:

• the identification of the applicant (breeder), the proposed name and the indication in Italian and Latin of the genus or species to which the variety belongs;
• the name and nationality of the author of the plant variety;
• any claim of priority.
New plant varieties

Procedure for filing:

The following documents must be attached to the application:

• the description of the variety;
• photographic reproduction of the variety;
• any information and documentation deemed useful for the purpose of examining the application;
• the declaration of the breeder regarding the novelty of the variety and the existence of any rights from third parties;
• documents proving any priorities claimed;
• proof of payment of the required fee.
New plant varieties

Granting procedure in Italy:

• The Italian Patent and Trademark Office ascertains the formal validity of the application and the documents attached to it;

• The Ministry of Agricultural, Food and Forestry Policies, after any variety tests, formulates a binding opinion on the substantial requirements for the validity of the patent
New plant varieties

Term of protection:

• The breeder's right lasts twenty years from the date of its grant. For trees and vines this right lasts thirty years from its granting.

• The effects of the patent apply from the date on which the application, accompanied by the descriptive elements, is made accessible to the public.

• With regard to the persons to whom the application, accompanied by the descriptive elements, has been notified by the breeder, the effects of the patent are effective from the date of such notification.
New plant varieties

Protection in the EU:

• The Community regulation n. 2100/94 of 27.07.1994 establishes the CPVR ("Community Plant Variety Right") which represents a specific industrial property right for the protection of new plant varieties;

• The CPVR allows the protection of new plant varieties throughout the EU through a single filing with the CPVO ("Community Plant Variety Office").
The right of priority

- Anyone who has duly filed an application for an invention patent, utility model, patent of new plant variety, design or model, or trademark, enjoys a priority right starting from the first application to make the filing of an application for an invention patent, utility model, or registration of a design or model, or trademark in accordance with the provisions of art. 4 of the Paris Convention.

- The priority period is twelve months for invention patents, utility models and new plant varieties.
The civil law procedural enforcement

Precautionary measures:

• **description**: report of the bailiff who, with necessary means (photographs, including expert), "describes" violations for evidential purposes;

• **seizure**: dispossession by a bailiff to prevent circulation and for probative purposes;

• **inhibitory**: prevents the continuation of the inhibited activity (manufacture, trade, use ...
The specialized sections

- specialized sections in the field of industrial and intellectual property are established at the courts and courts of appeal of Bari, Bologna, Catania, Florence, Genoa, Milan, Naples, Palermo, Rome, Turin, Trieste and Venice.
Other civil law enforcement rules
(Italian Civil Code)

Art. 2598 - *Acts of unfair competition*
Without prejudice to the provisions concerning the protection of distinctive signs and patent rights, performs acts of unfair competition, anyone who:

- 1) uses names or distinctive signs capable of producing confusion with the names or distinctive signs legitimately used by others, or slavishly imitates the products of a competitor, or performs by any other means suitable acts to create confusion with the products and with the activity of a competitor;

- 2) (…) *it appropriates the merits* of a competitor's products or business.
Criminal law enforcement

Art. 473 c.p. - Counterfeiting, alteration or use of distinctive signs of intellectual property or industrial products

• Anyone who counterfeits or alters national or foreign trademarks or distinctive signs of intellectual property or industrial products, or, without being involved in counterfeiting or alteration, makes use of such counterfeit or altered trademarks or signs, is punished with imprisonment. up to three years and with a fine of up to € 2,065.

• The same penalty is subject to anyone who counterfeits or alters national or foreign patents, designs or industrial models, or, without being involved in counterfeiting or alteration, makes use of such counterfeit or altered patents, designs or models.

• The foregoing provisions apply as long as the rules of internal laws or international conventions on the protection of intellectual or industrial property have been observed.
How to protect themselves?

• by registering or patenting intellectual property rights;
• through the stipulation of contractual agreements;
• through the intervention of the customs authorities;
• through legal action.
Thank you very much for your attention