Research Article

Advances in Nanoscience and Nanotechnology

Innovation Article: 36 Over Passed Restrictions of Magnetism Achieved by the 96 Multiple Magnetic Polarities-Interactions Performed by the Kertsopoulos World Patented Invention vs. the Known Two

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Abstract

The inventor-author, invited as an honorable speaker of "special session", presented with experiments his invention "Magnetic System of Multiple Interactions" at the 2nd International Conference on Magnetism and Magnetic Materials, Budapest, on September 24, 2018. As it is known: in the state of the art, the like and the unlike polarity between two magnets remains independent of the distance between them. According to the invention: the like and the unlike polarity between two magnetic constructions depends on the distance between them. The know-how of the invention makes it possible for interacting magnetic constructions to possess and perform interchangeable - more than 96 - polarities and interactions. Polarities and magnetic fields can in multiple ways interchange, depending on the varying distance between two interacting confronted magnetic constructions, offering many new variable design capabilities. For the first time, new types of poles are created, for example: simultaneous like-unlike poles or simultaneous unlike-like poles are created, causing stable or unstable balance as an interaction; also, for the first time in magnetism, new types of magnetic fields are formed never before observed, for example: remote fields of very strong attraction, without however, the contact of the magnetic constructions. The magnetic devices that perform these multiple interactions are fully patented internationally, published in a book in English, by the inventor. The new scientific laws and principles, revealed through these experiments enrich the very basics, the foundation of magnetism. Before we can list these, it is necessary to list the 36 main – but certainly not all – restrictions of the known magnetism of the state of the art that are over passed, as results of the successful experiments also, performed at the conference. The Introduction and experimental section explain the different interactions achieved with figures and tables and the conclusion gives some examples of new possible product constructions.

Keywords: Magnetic interactions, magnetism restrictions, multiple interactions, magnetism, polarities, kertsopoulos invention.

Introduction

The first multiple interactions arrangement of the invention is the three interactions vs. the either one known of the state of the art. This occurs as follows:

A certain plurality of dipolar magnets arranged in specific positions is placed by gluing on a thin planar surface, thereby comprising a magnetic arrangement. Each magnetic arrangement is perpendicularly supported on a thin, planar, horizontal and non-magnetic base, thereby making a "magnetic construction". This magnetic construction slides in the grooves of a guide and interacts with its respective magnetic construction with which it constitutes a pair. The motion of the pair of the magnetic constructions on the guide is controlled manually. The guide allows the two magnetic constructions to interact in an attractive or repulsive manner and even to balance unmoving, remaining stable, however, this is always achieved only towards one spatial dimension (forward and backward) so that the faces of the magnetic constructions remain always confronted and parallel to each other. The guide with the two magnetic constructions, which interact there on constitute the magnetic apparatus, which is the product of the invention. The user of the product moves forward or/and backwards the confronted magnetic constructions in various ways as desired. Each innovational symmetrical arrangement of the dipolar magnets creates new technological distributions of the magnetic lines, which in both manners regarding their path through the magnets and also regarding their distribution in the surrounding air space as dynamic lines determine the geometry of their magneto static field. In the state of the art, the poles confronted in-between interacting magnetic constructions are only like or only unlike independently of the opening or closing fluctuation of the distance intervening between the poles.

In the operation of the present application the poles in-between interacting magnetic constructions of the invention become like, unlike, like-unlike and unlike-like depending on the opening or closing fluctuation of the distance intervening between the poles.

The main characteristic features of properties possession and production of interactions and phenomena in the technological

application of the invention lies in the uniqueness that on the guide there exist three first-time emerged different delimitated phenomena of magnetic interdependence, namely three first-time emerged different multi-planar polarities in-between two magnetic bodies, which create correspondingly three first-time emerged different interactions with also three first-time emerged different fields. All these new interdependences are produced in the opening or closing fluctuation of the distance that is regulated within the one and only empty air space when two magnetic constructions become confronted. More analytically:

Experimental Section, Materials and Methods

A) Depending on the position and the distance of the magnetic constructions, their magnetic poles become in the nearer distance unlike producing attractive in effect field and in the further distance become like producing repulsive in effect field, while in the mid-distance become unlike and like simultaneously where namely because of the intensity equivalence of the attractive and repulsive forces a production of unstable balance interaction occurs. The front poles have to be like.

B) In the case where we bring together two other, differently configured types of confronted magnetic constructions, then, depending on the position and the distance of the magnetic constructions, their magnetic poles become in the nearer distance like producing repulsive in effect field and in the further distance become unlike producing an attractive in effect field, while in the middle distance become like and unlike simultaneously where namely because of the intensity equivalence of the repulsive and attractive forces a production of stable balance interaction occurs (secured attractive field of no-contact from a distance). The front poles have to be unlike.

For the above arrangement we have 3 + 3 = 6 magnetic interactions in total vs. the known 2 of the state of the art. For both A) and B) see Fig's 1, 2 and 5.

All different interactions in each of the two above cases are three; however, there are additional other functions of the magnetic apparatus, which introduce in A) and B) case respectively, two further first-time emerged interactions. For each of these cases there are five first-time emerged different interactions in the same empty air space between two magnetic constructions.

For this above arrangement then, we will have 5 + 5 = 10 magnetic interactions in total vs. the known 2 of the state of the art. See Fig's 3, 4 and 6.

Accordingly, as 2 interactions were added to the three to make 5 interactions, the invention evolves its symmetrical arrangements in a continuous innovative process and keeps on adding 2 interactions to the 5, to make 7 and continues to add 2 interactions to the 7, to make 9 and in the same manner makes 11 and 13, etc.

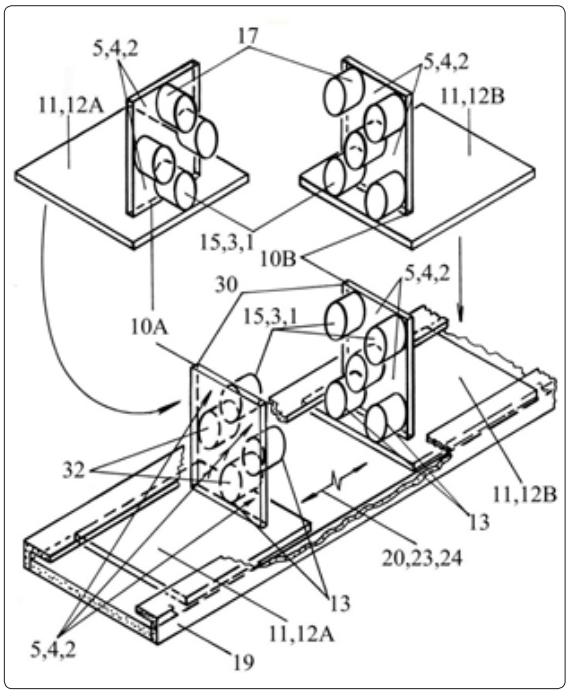


Figure 1: The 3 + 3 = 6 magnetic interactions arrg't of symmetrical placement of magnets (numbering non- referable in all the figures.)

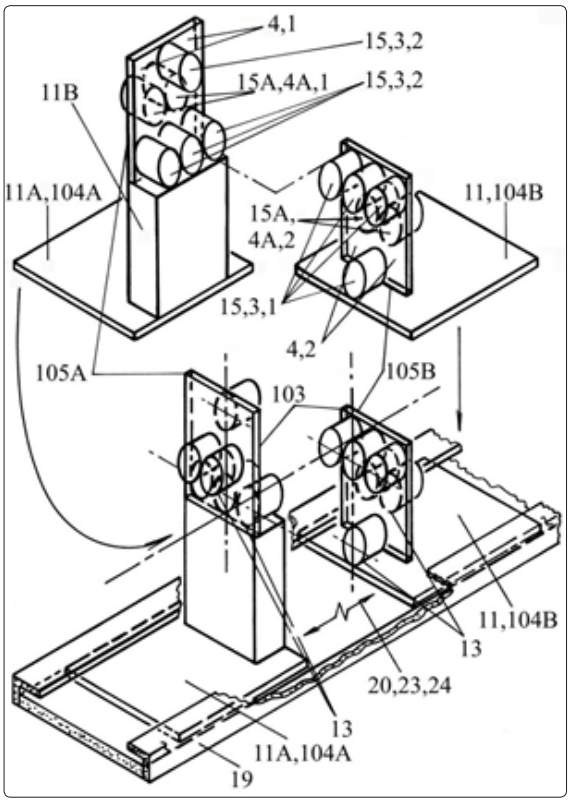


Figure 2: The 3 + 3 = 6 magnetic interactions arrg't of symmetrical placement of magnets (another different symmetry producing the same results as Figure 1)

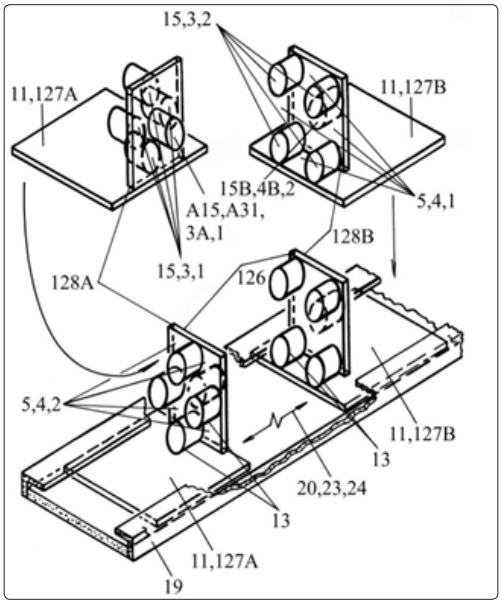


Figure 3: The 5 + 5 = 10 magnetic interactions arrg't of symmetrical placement of magnets.

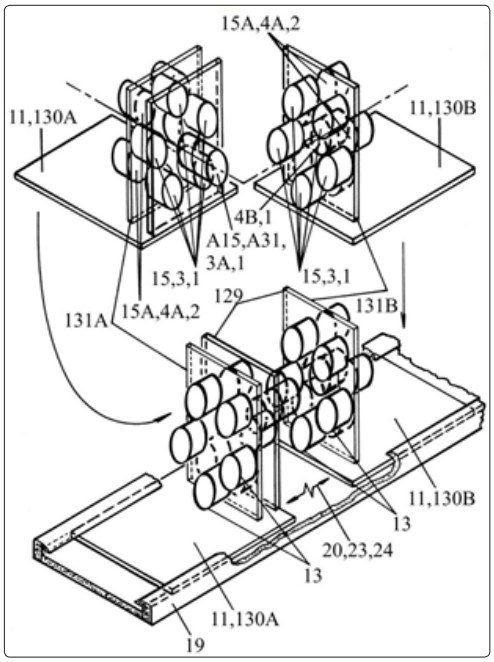


Figure 4: The 5 + 5 = 10 magnetic interactions arrg't of symmetrical placement of magnets (another different symmetry producing the same results as Fig. 3)

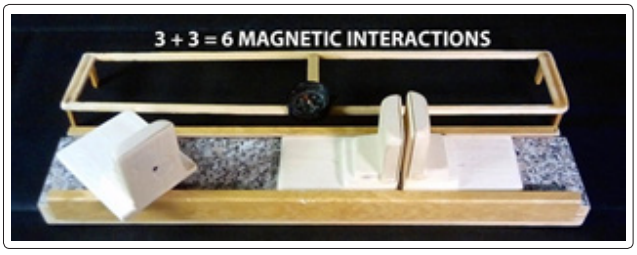


Figure 5: The 3 + 3 = 6 magnetic interactions image

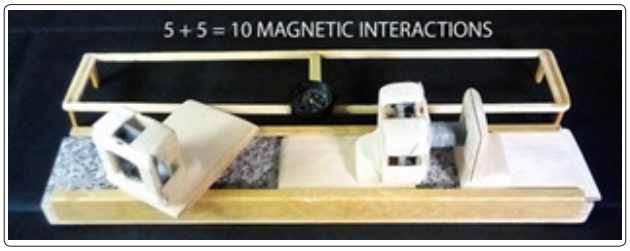


Figure 6: The 5 + 5 = 10 magnetic interactions image

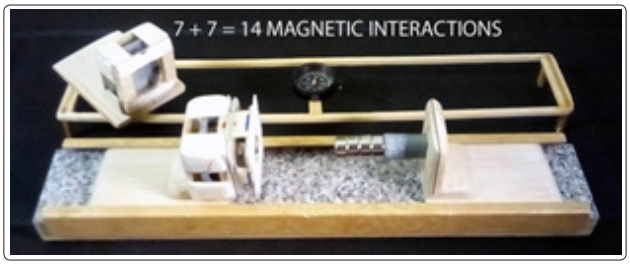


Figure 7: The 7 + 7 = 14 magnetic interactions image

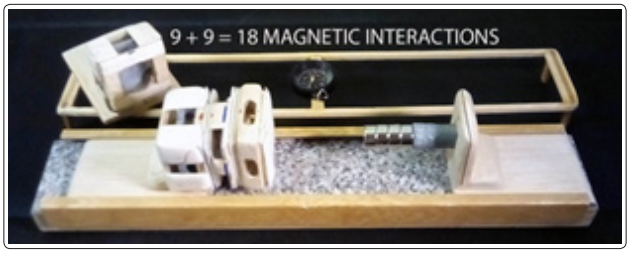


Figure 8: The 9 + 9 = 18 magnetic interactions image

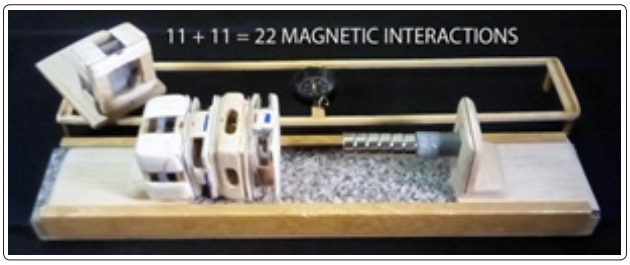


Figure 9: The 11 + 11 = 22 magnetic interactions image

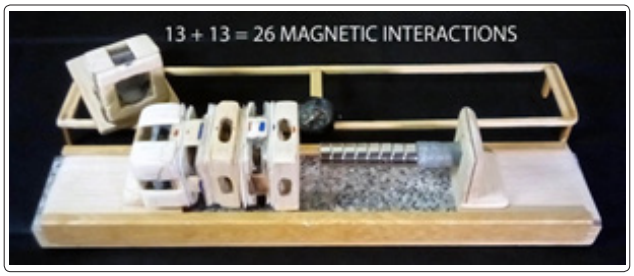


Figure 10: The 13 + 13 = 26 magnetic interactions image

Below are the specific interactions occurring in every unique arrangement of multiple interactions starting from the nearest distance between the interacting magnetic constructions and proceeding outwards to the greatest distances including in the last interaction the distance of infinity.

The 3 + 3 = 6 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion (to infinity)

By replacing one of the magnetic constructions on the guide having the same symmetries to the above but opposite to the above placement of the poles in the corresponding construction it replaces one obtains the opposite to the above interactions, namely:

4. When the nearest distance is: repulsion
5. Stable balance
6. Attraction no-contact (to infinity)

The same procedure of replacing one magnetic construction only and by keeping the same symmetry but placing the poles in the opposite order to obtain the opposite interactions is followed in every arrg't of multiple interactions that follows.

The 5 + 5 = 10 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion
4. Stable balance
5. Attraction no-contact

By replacing one of the magnetic constructions on the guide one obtains the opposite to the above, namely:

6. When the nearest distance is: repulsion
7. Stable balance
8. Attraction no-contact (to infinity)
9. Unstable balance
10. Repulsion

The 7 + 7 = 14 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion
4. Stable balance
5. Attraction no-contact
6. Unstable balance
7. Repulsion

By replacing one of the magnetic constructions on the guide one obtains the opposite to the above, namely:

8. When the nearest distance is: repulsion
9. Stable balance
10. Attraction no-contact (to infinity)
11. Unstable balance
12. Repulsion
13. Stable balance
14. Attraction no-contact

The 9 + 9 = 18 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion
4. Stable balance
5. Attraction no-contact
6. Unstable balance
7. Repulsion
8. Stable balance
9. Attraction no-contact

By replacing one of the magnetic constructions on the guide one obtains the opposite to the above, namely:

10. When the nearest distance is: repulsion
11. Stable balance
12. Attraction no-contact (to infinity)
13. Unstable balance
14. Repulsion
15. Stable balance
16. Attraction no-contact
17. Unstable balance
18. Repulsion

The 11 + 11 = 22 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion
4. Stable balance
5. Attraction no-contact
6. Unstable balance
7. Repulsion
8. Stable balance
9. Attraction no-contact
10. Unstable balance
11. Repulsion

By replacing one of the magnetic constructions on the guide one obtains the opposite to the above, namely:

12. When the nearest distance is: repulsion
13. Stable balance
14. Attraction no-contact (to infinity)
15. Unstable balance
16. Repulsion
17. Stable balance
18. Attraction no-contact
19. Unstable balance
20. Repulsion
21. Stable balance
22. Attraction no-contact

The 13 + 13 = 26 Magnetic Interactions

1. When the nearest distance is: attraction
2. Unstable balance
3. Repulsion
4. Stable balance
5. Attraction no-contact
6. Unstable balance
7. Repulsion
8. Stable balance
9. Attraction no-contact
10. Unstable balance
11. Repulsion
12. Stable balance
13. Attraction no-contact

By replacing one of the magnetic constructions on the guide one obtains the opposite to the above, namely:

14. When the nearest distance is: repulsion
15. Stable balance
16. Attraction no-contact (to infinity)
17. Unstable balance
18. Repulsion

19. Stable balance
20. Attraction no-contact
21. Unstable balance
22. Repulsion
23. Stable balance
24. Attraction no-contact
25. Unstable balance
26. Repulsion

Below is a list of the existing 36 restrictions of magnetism, which have been over passed by the invention. The field case numbering corresponds to the previous numbered pole case, i.e. Field case1corresponds to pole case1.

Poles as Entities

1) Like poles can never be made to attract by a change in distance. (Elementary & basic)
Over Passed (Case 1)

2) Unlike poles cannever be made to repel by a change in distance. (Elementary & basic)
Over Passed (Case 2)

Fields as Entities

3) An attractive field can only occur in-between unlike poles and it can never occur in-between existent like poles. (Elementary & basic restriction)
Over Passed (Case 1)

4) A repulsive field can only occur in-between like poles and it can never occur in-between existent unlike poles. (Elementary & basic restriction)
Over Passed (Case2)

Poles as Entities

5) Even if one creates the technological condition for two like poles to create an attractive field in-between them, it is not possible for the poles to completely eliminate the repulsion field and provide only a resultant attractive field (a hypothetical restriction that can arise only from the fact that restriction 1) has been successfully surpassed by technological means).
Over Passed (Case 3)

6) Even if one creates the technological condition for two unlike poles to create a repulsive field in-between them, it is not possible for the poles to completely eliminate the attraction field and provide only a resultant repulsive field (a hypothetical restriction that can arise only from the fact that restriction 2) has been successfully surpassed by technological means).
Over Passed (Case 4)

Fields as Entities

7) A complete elimination of the resultant repulsive field is impossible to occur in-between two like poles even if an attractive field is somehow succeeded to occur by technological means (a hypothetical restriction).
Over Passed (Case 3)

8) A complete elimination of the resultant attractive field is impossible to occur in-between two unlike poles even if a repulsive field is somehow succeeded to occur by technological means (a hypothetical restriction).
Over Passed (Case 4)

Poles as Entities

9) It is impossible to bring two like poles close together and while they retain their singular polar characteristics of their unique magnetic field, to be able to obtain a complete rest of the poles, without a reactive interaction of a repulsive field, which as a resultant magnetic field always occurs, between the poles. This restriction occurs because of the fact that a resultant repulsive magnetic interaction inevitably always occurs in this situation, making it impossible for the poles to stay at rest. (Elementary & basic restriction)
Over Passed (Case 5)

10) It is impossible to bring two unlike poles close together and while they retain their singular polar characteristics of their unique magnetic field, to be able to obtain a complete rest of the poles, without a reactive interaction of an attractive field, which as a resultant magnetic field always occurs, between the poles. This restriction occurs because of the fact that a resultant attractive magnetic interaction inevitably always occurs in this situation, making it impossible for the poles to stay at rest. (Elementary & basic restriction)
Over Passed (Case 6)

Fields as Entities

11) It is impossible for a resultant repulsive magnetic field, which always occurs in between the close distance of two like poles to be completely cancelled-out by any means, by the technological construction and specifications of the poles of the state of the art themselves. (Elementary & basic restriction)
Over Passed (Case 5)

12) It is impossible for a resultant attractive magnetic field, which always occurs in between the close distance of two unlike poles to be completely cancelled-out by any means, by the technological construction and specifications of the poles of the state of the art themselves. (Elementary & basic restriction)
Over Passed (Case 6)

Poles as Entities

13) The compass needle can never point to an outside area of two poles, which have been joined by strong attraction. Other words: the outside area, which is created from the attractive unison of two poles, can never become or behave as a pole. (Elementary & basic restriction)
Over Passed (Case 7)

Fields as Entities

14) It is impossible to produce or create magnetic field lines of force, which become or behave with polar attributes or characteristics, in the outside vicinity and area, which is near the attraction of two poles. (Elementary & basic restriction)
Over Passed (Case 7)

Poles as Entities

15) When two poles join by attraction they can never create or produce a new pole at the joint of unison. Other words: poles do not add up, to form new poles. As soon as attraction is accomplished, the opposite occurs: the poles vanish as poles from the outside area and the compass needle cannot point at the area of the joint.

(Elementary & basic restriction)
Over Passed (Case 8)

Fields as Entities

16) We cannot create fields from the strong attraction of two like poles, and at 90 degrees orientation to their axis to obtain a polar field production of an opposite polarity, to the poles. We are faced with three restrictions: first, the restriction that like poles do not attract, second, the restriction that a compass needle never points to the area of two joined poles and third, when two poles join up, they vanish as poles and they never add up to make a new pole, hence a new type of field. (Elementary & basic restriction)
Over Passed (Case 8)

Poles as Entities

17) A pole cannot be divided into two other poles possessing the same polar attributes as the initial pole, for example: a south pole cannot be divided into two other south poles. (Elementary & basic restriction)
Over Passed (Case 9)

18) A pole cannot be divided into two other poles, which will be at 90 degrees orientation to the axis orientation of the initial pole and which both poles will also possess opposite polarity to the initial pole, for example: a south pole cannot be divided into two other north poles. (Elementary & basic restriction)
Over Passed (Case 10)

Fields as Entities

19) A magneticfield possessing specific polar attributes cannot be divided into two other magnetic fields possessing the same attributes as the initial field in the vicinity of the pole which produces the initial field, simply because the pole itself cannot be divided. (Elementary & basic restriction)
Over Passed (Case 9)

20) A magnetic field possessing specific polar attributes cannot be divided into two other magnetic fields possessing the opposite attributes to the initial field in the vicinity of the pole which produces the initial field, simply because the pole itself cannot be divided. (Elementary & basic restriction)
Over Passed (Case 10)

Poles as Entities

21) The inward-outward barriers of the magnetic poles physical limits cannot be extended beyond their limits and create a physical pole barrier beyond their jurisdiction, within the vector location of the outward magnetic field. (Elementary & basic restriction)
Over Passed (Case 11))

Fields as Entities

22) Within an outward magnetic field's vector, which is produced as a result of two physical magnetic poles, we cannot have a creation of a new physical pole that however will act as a magnetic field/pole. As up to now magnetic poles and magnetic fields exist in magnetism and a magnetic field/pole entity is restricted to exist. (Elementary & basic restriction)
Over Passed (Case 11))

Poles as Entities

23) When the poles go against each other, producing though a repulsive field, they cannot possess themselves any technological attribute that will make them suddenly lose all the repulsion force especially at the high intensity level, when they get closer to each other and observe a complete loss of the resultant repulsive force which already existed there. (Elementary & basic restriction)
Over Passed (Case 12)

Fields as Entities

24) The magnetic field cannot be seen to convert itself into a field/pole barrier and at a specific location within the magnetic field vector, which is of a repulsive nature, to observe a complete loss of this field's characteristics, at the point where the poles were getting closer together and the field was at a high intensity. Another words when two poles go against each other, producing a repulsive field, it is impossible for this field to suddenly stop its existence. (Elementary & basic restriction)
Over Passed (Case 12)

Poles as Entities

25) When the poles go away from each other, in a repulsive field, they cannot possess themselves any technological attribute that will make them suddenly lose all the repulsion and observe a complete loss of the expected normal decay force. Another words there is no technological possibility which poles can possess to suddenly stop the continuous decay of a repulsive field, which in all cases this field should decay to nil conditions to infinity. (Elementary & basic restriction)
Over Passed (Case 13)

Fields as Entities

26) When two poles go away from each other, within a repulsive field, it is impossible for this field to suddenly stop its existence, because it should continuously decay to nil conditions to infinity. (Elementary & basic restriction)
Over Passed (Case 13)

Poles as Entities

27) When the poles go away from each other, in an attractive field, they cannot possess themselves any technological attribute that will make them suddenly lose all the attraction and observe a complete loss of the expected normal decay force. Another words there is no technological possibility which poles can possess to suddenly stop the continuous decay of an attractive field, which in all cases this field should decay to nil conditions to infinity. (Elementary & basic restriction)
Over Passed (Case 14)

Fields as Entities

28) When two poles go away from each other, within an attractive field, it is impossible for this field to suddenly stop its existence, because it should continuously decay to nil conditions to infinity. (Elementary & basic restriction)
Over Passed (Case 14)

Poles as Entities

29) When the poles go against each other, producing though an attractive field, they cannot possess themselves any technological attribute that will make them suddenly lose all the attraction force especially at the high intensity level, when they get closer to each other and observe a complete loss of the resultant attractive force which already existed. (Elementary & basic restriction)

Over Passed (Case 15)

Fields as Entities

30) The magnetic field cannot be seen to convert itself into a field/pole barrier and at a specific location within the magnetic field vector, which is of an attractive nature, to observe a complete loss of this field's characteristics, at the point where the poles were getting closer together and the field was at a high intensity. Another words when two poles go against each other, producing an attractive field, it is impossible for this field to suddenly stop its existence making the attraction impossible. (Elementary & basic restriction)

Over Passed (Case 15)

Poles as Entities

31) Two magnetic constructions facing each other and going against each other can only create and produce one type of magnetic field, either a homogeneous attractive field or a non-homogeneous repulsive field. It is impossible to create or produce more than one type of magnetic field in-between two magnetic constructions, which in turn can mirror-influence the behaviour of the poles, so, the three interactions magnetic pole arrangement possibility is impossible to exist. (Elementary & basic restriction)

Over Passed (Case 16)

Fields as Entities

32) It is impossible to create more than one type of magnetic field in-between two poles. Other words, it is restricted to have a three interactions magnetic field in the order: attractive-neutral-repulsive or repulsive-neutral-attractive. (Elementary & basic restriction)

Over Passed (Case 16)

Poles as Entities

33) It has never been observed for magnetic poles to create or produce neutral magnetic fields, which in turn will stop or ignite attractive or repulsive fields, in combination or not and affecting accordingly the forces applied to the poles themselves. Another words it is restricted for two poles to go against each other with a strong repulsive force and at the point where the field gets stronger, to have a position of nil resultant magnetic field (neutral position), with complete rest of the poles and at a closer distance to have a strong attractive field and the poles to strongly attract and unite or the opposite to the above interactions to occur. (Elementary & basic restriction)

Over Passed (Case 17)

Fields as Entities

34) It is not possible to create interchangeable multiple physical neutral magnetic fields in-between physical magnetic poles. Elementary & basic restriction)

Over Passed (Case 17)

Poles as Entities

35) Two magnetic constructions facing each other and going against each other can only create and produce one type of magnetic field, either a homogeneous attractive field or a non-homogeneous repulsive field. It is impossible to create or produce more than one type of magnetic field in-between two magnetic constructions, which in turn can mirror-influence the behaviour of the poles, so, the five , or more multiple interactions magnetic pole arrangement possibility is impossible to exist. (Elementary & basic restriction)

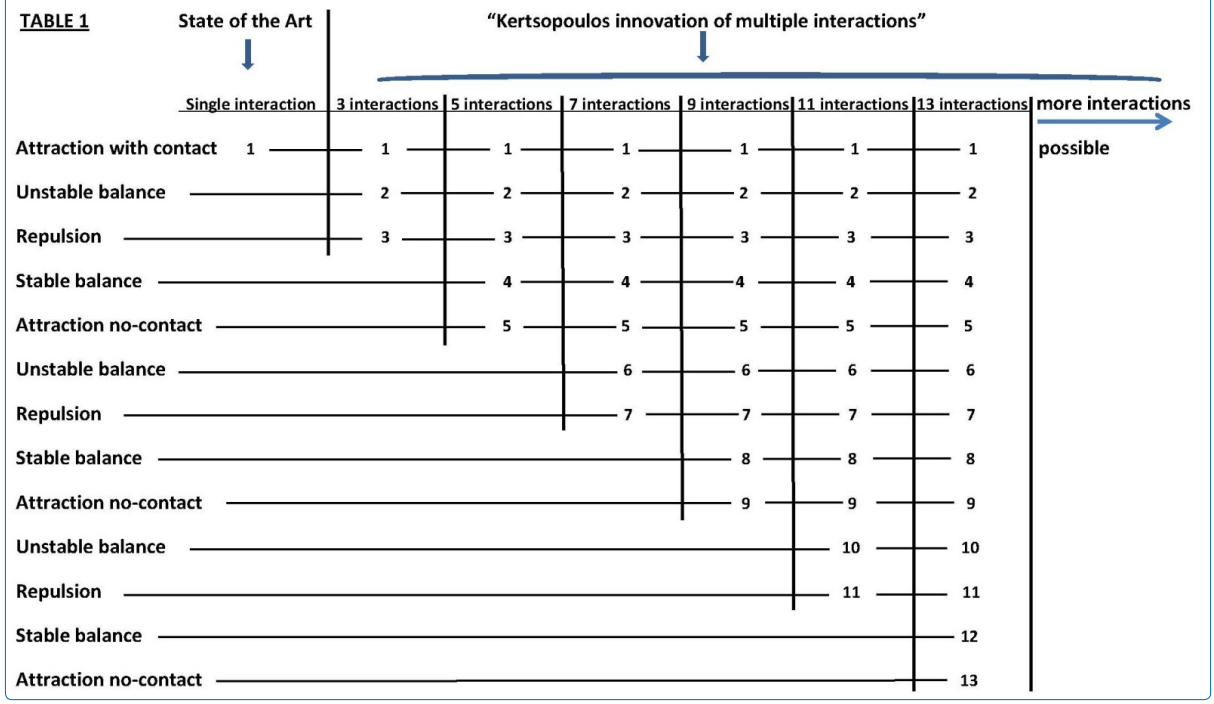
Over Passed (Case 18)

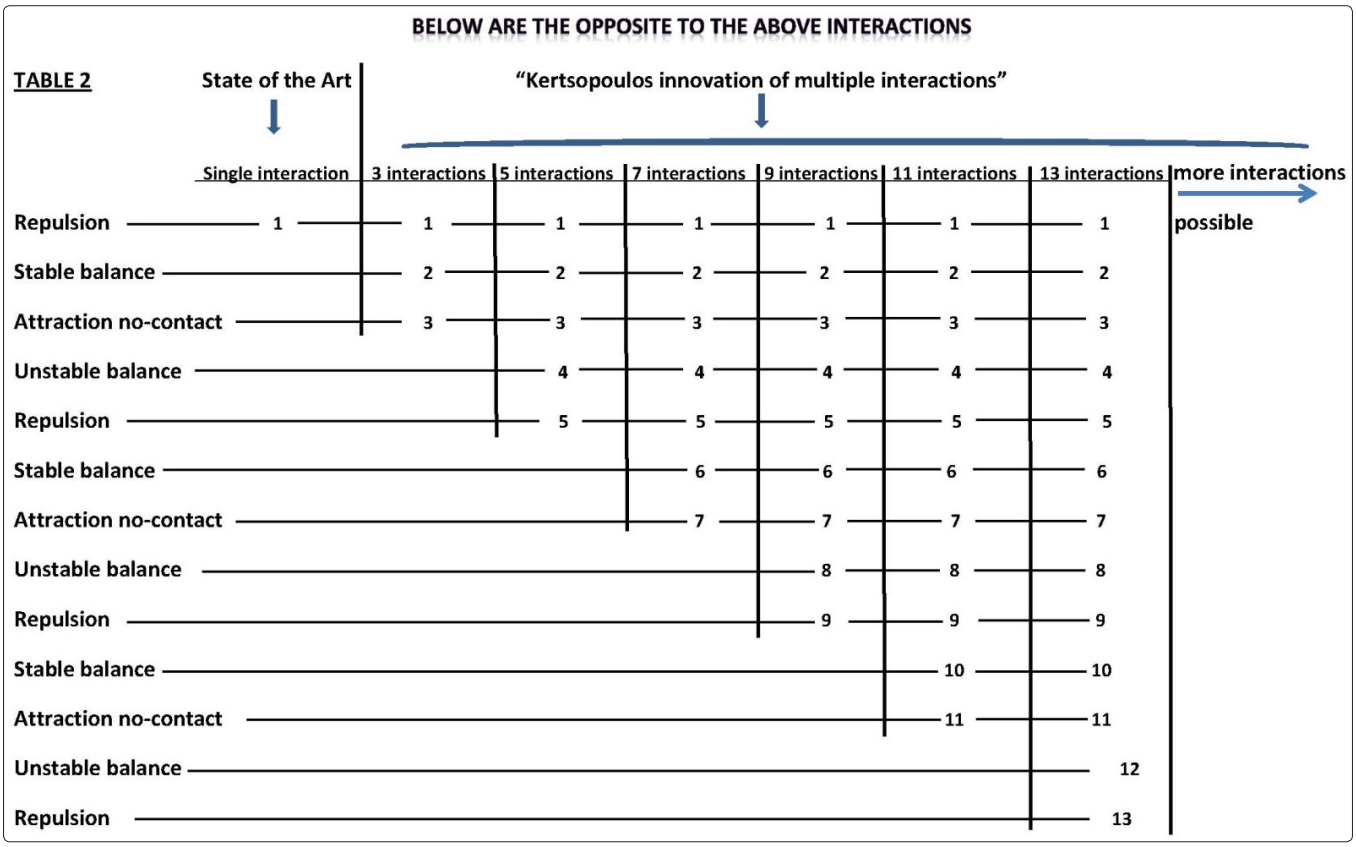
Fields as Entities

36) It is impossible to create more than one type of magnetic field in-between two poles. Other words, it is restricted to have a multiple interactions magnetic field. (Elementary & basic restriction)

Over Passed (Case 18)

Tables of the complete "Kertsopoulos innovation of multiple magnetic interactions" produced: 3+3 and 5+5 and 7+7 and 9+9 and 11+11 and 13+13=96 in total interactions vs. the known 2 of the state of the art.





Proof of Accomplishment of the Experiments for Viewing over the Internet and Also for Viewing All the Interactions in Action

Please view for each arrangement of multiple interactions as listed above, the published article on LinkedIn, which includes video of each experiment as performed by the inventor in the Magnetic Materials 2018 conference in Budapest in his presentation of "special session". The title of the article is: "Magnetic system of multiple interactions» -Kertsopoulos invention at Magnetic Materials 2018 conference in Budapest, Sep. 24-26, 2018.

The link to the article is:

https://www.linkedin.com/pulse/magnetic-system-multiple-interactions-kertsopoulos-sep-kertsopoulos/

Conclusion

Does the invention promote as a core technology the production of new patented products?

Yes. Since the know-how of the invention is a world published patent, many new patent projects can be created, based either on the already established industrial object or on the method or on the process of operation of the invention.

The Invention is Directed to A Broad Range of Fields:

1. To the industry as a key source of investment and innovation for the implementation and production of new products and services.
2. To the organizations, companies, academia, research and technology institutions active in relevant fields to contribute to the research, development and design of products.

   The following examples are indicative of the range of domains in which the new magnetic fields and the new interactions of the invention can be applied.

Examples:

a) Artificial Members (Prostheses) of the Human Body for the Lower and Upper Extremities.

The prosthetic pouch is the most important part of the artificial member because it comes in direct contact with the skin. Pains and inflammations can be totally avoided when the prosthesis insert of the artificial member does not come into direct contact with the skin due to the applied "magnetic attraction locked field from a distance of no contact" that the invention achieves.

Artificial upper and lower limb prosthesis is an important application of robotics in medicine. In addition, the novel multi-faceted magnetic fields and polarities of the invention are applied to the mechanical part of a robotic system, that is to say, to the whole of its arms, and in particular to the joints and to the movable members, giving precision, speed and expanded range of motion.

b) Rail Vehicles (Trains)

The engine vehicle-wagon connection, as well as the wagon's to each wagon connection, for the first time can be achieved without mechanical contact with the "electromagnetic remotely locked attractive field", offering maximum performance and safety especially in the case of derailment of the engine vehicle by unlocking it from the towed wagons, which they will eventually be braking, providing absolute safety to the passengers.

c) Mechanical Systems of Vehicles

Connections and contacts in the mechanical systems can be replaced by magnetic couplings with the "combined magnetic repulsive and attractive fields", such as body and suspension joints, chassis bumpers, roof with frame pillars and in applications to dampers

or shock absorbers. Also, magnetic couplings can be applied to hydraulic and pneumatic automation of vehicles, for example brakes, to overcome contact stresses and high frictional temperatures in the respective systems. This provides the automotive industry with a range of advanced magnetic security technologies and collision avoidance systems.

d) The Bearings of the Bridges Between the Superstructure and the Infrastructure

The various types of bearings can be significantly upgraded by the magnetic fields achieved by the invention since they are responsible for the correct connection of the deck (superstructure) of the bridge to the pedestals (infrastructure). The bearings may allow horizontal movements or bends or slips in one or more directions or provide damping. The magnetic connections of the invention are applicable to all types of bearings as well as to expansion joints as well as to seismic stoppers limiting displacements to avoid overturning the deck. An improved safety is achieved in the construction of bridges of various types.

e) Visual Arts Related to Culture and the Environment

Experimenting with the magnetic phenomena and interactions of the invention can inspire and create new forms and proposals of visual creation with the elevated swings in the air of small and large sculptures, suspensions in the air and static balancing of awkward one legged structures. An example is the modern equilibration and synthesis concept through experimentation with a variety of shapes, colors and materials that the inventor has already applied to his constructions with the title: Static suspension in the air able to swing and Static Equilibration.

These are shown on three videos:

https://www.youtube.com/watch?v=TvS-VKScJ3Q
https://www.youtube.com/watch?v=H0XcdD1isvU
https://www.youtube.com/watch?v=ClZyYj6QxVI

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https://www.linkedin.com/pulse/kertsopoulos-magnetic-invention-recognized-cern-top-18-kertsopoulos/?published=t

References

1. Georgios K. Kertsopoulos (2016) Magnetic system of three interactions.USPTO (U.S.A.) Patent: US9, 418,781 B2. https://worldwide.espacenet.com/publicationDetails/originalDocument?FT=D&date=20160816&DB=&locale=en_EP&CC=US&NR=9418781B2&KC=B2&ND=5
2. Georgios K. Kertsopoulos (2016) Magnetic system of three interactions. EPO (European Union) Patent Bulletin 2016/20: EP2842140 B1. https://worldwide.espacenet.com/publicationDetails/originalDocument?FT=D&date=20160518&DB=&locale=en_EP&CC=EP&NR=2842140B1&KC=B1&ND=7
3. Georgios K. Kertsopoulos (2016)Magnetic system of three interactions.CIPO (CANADIAN) Patent CA 2869680. http://www.ic.gc.ca/opic-cipo/cpd/eng/patent/2869680/summary.html?query=magnetic+system+of+three+interactions&start=1&num=50&type=basic_search
4. Georgios K. Kertsopoulos (2013) Magnetic system of three interactions.International protection published by the International office of patents WIPO-PCT, bearing the No WO/2013/136097.https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2013136097&recNum=1&office=&queryString=kertsopoulos&prevFilter=&sortOption=Pub+Date+Desc&maxRec=1
5. Georgios K. Kertsopoulos (2015) Magnetic system of three interactions.IP AUSTRALIA Patent 2013234102. https://worldwide.espacenet.com/publicationDetails/biblio?CC=AU&NR=2013234102B&KC=&locale=en_EP&FT=E
6. Georgios K. Kertsopoulos (2012) Magnetic system of three interactions.Magnetic system comprised from constituted constructions of magnetic apparatus producing first-time emerged properties of poles and fields and a method for manufacturing the same. Greek published patent GR20120100153 (A). https://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20131015&DB=&locale=en_EP&CC=GR&NR=20120100153A&KC=A&ND=1
7. Georgios K. Kertsopoulos (2013) MAGNETSYSTEM AUS DREI WECHSELWIRKUNGEN. Patent Germany60 2013 007 667.7. https://register.dpma.de/DPMAregister/pat/register?AKZ=E137192332&lang=EN
8. Georgios K. Kertsopoulos (2013) Magnetic system of three interactions. United Kingdom Patent EP13719233.2. https://www.ipo.gov.uk/p-ipsum/Case/ApplicationNumber/EP13719233.2
9. Georgios K. Kertsopoulos (2013) SYSTÈME MAGNÉTIQUE À TROIS INTERACTIONS. French Patent EP2842140. https://bases-brevets.inpi.fr/en/document-en/EP2842140.html
10. Georgios K. Kertsopoulos (2013) Magnetic system of three interactions. Switzerland Patent EP02842140. https://www.swissreg.ch/srclient/faces/jsp/patent/sr300.jsp?language=en&section=pat&id=EP2842140
11. Georgios K. Kertsopoulos (2017) MAGNETIC SYSTEM OF MULTIPLE INTERACTIONS (Volumes I & II). KERTSOPOULOS PUBLISHING. https://www.linkedin.com/pulse/book-magnetic-system-multiple-interactions-inventor-k-kertsopoulos/