Research Article

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Experimental Representation of the 36 Overpassed Restrictions Achieved by the Kertsopoulos Magnetic Invention, the 96 New Types of Poles and Interactions and the Inventive Step

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Abstract

The author describes in a complete and comprehensive manner the newly invented scientific magnetic designs and constructions that occur throughout the technology that is introduced in his world patent WO2013136097A4 bearing the title: "Magnetic system of three interactions". The technology comprises a magnetic system performing three or five interactions (8X2=16), however, this is expanded and seven, nine, eleven and thirteen interactions are accomplished and shown (48X2=96). As an application, the magnetic system initially produces magnetic phenomena and interactions, such as the production of three or in other cases five different interactions and also their related three or five opposites, depending on the distance existing between the confronted magnetic constructions. These multiple interactions occur for the first time in the state of the art between confronted magnetic constructions, where there, only one interaction has been observed up to now. The magnetic system is a fully systemized product that can be used as an experimental instrument by everyone interested, to exploit the newly developed designing/constructing possibilities in the magnetic/electromagnetic products. This need for "magnetic containment" is successfully solved by this invention. While the well-known like and unlike polarity are still here and they will always be around, they have been enriched by an additional more than 96 different polarities causing more than 96 different interactions and types of magnetic fields, making also possible in many different designs the 100% homogenized magnetic field. "Like-unlike" and "unlike-like" polarities are now formed causing newly-observed "stable balance" and "unstable balance" interactions and much more… 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.

Keywords: Kertsopoulos invention; Magnetic interactions; Magnetism; Magnetism restrictions; Multiple interactions; Polarities

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Introduction

More than 96 completely new types of polarities and interactions are performed by the "Kertsopoulos invention of multiple interactions" which is world patented in more than 11 countries [1-11]. Instead of observing one single interaction between confronted interacting magnetic constructions, we can construct multiple polarities interchangeable according to the distance between the constructions and thus obtain interchangeable multiple interactions as a result of the interchanging polarities. Confronted interacting constructions are repelling each other with like polarity at the greater distance and when they come closer they strongly attract each other and at the critical distance where the poles are "unlike-like" simultaneously, they rest in"unstable balance". The state of the art does not possess three interactions according to the variable distance, cannot interchange the polarity and hence the interactions and cannot possess "unlike-like" poles simultaneously as a polarity.

Also, the opposite to the above three occurs with a change of the polarity in the constructions' symmetry and at the greater distance we can observe the constructions strongly attracting each other and when they come closer they strongly repel each other having an air gap unable to unite and at the critical distance where the poles are "like-unlike" simultaneously, they rest in "stable balance". The state of the art cannot possess "like-unlike" poles simultaneously as a polarity. Furthermore, the three interactions with their opposites can be constructed with two more interactions and become 5 and if we keep on adding two, they become 7 or 9 or 11 or 13 interactions and even more. New principles in magnetism are introduced [12-14].

The constructional inventive step of the invention, figures 1, 2, 3 and 4.

Figures 1, 2, 3 and 4 show the inventive step of the invention, which is the core and the common application in all applications of the method, and depict the manner by which the invention exploits and makes useful all the polar properties of the loops of the magnetic lines, and each dipole used in the arrangements, in one or the other way, makes use of this inventive step of the construction.

Figure 1 shows every specific in magnetic vector and direction part of the loop (8) of a dipole (7), in the front bundle of dynamic lines (3), two poles corresponding to every two loops, which poles regard the two poles (1, 2) of the dipole (7) and also in front/rear bundle of dynamic lines (4), which is in the neutral zone of the magnet (5),

where there two other beneficial poles are present, which correspond to each bundle of loops of the neutral zone (8, 5) and are of opposite polarity from their respective adjacent front poles of the same loop. The term "beneficial pole" is used in the sense that in the interactions of the applications of the invention it functions in the same way and with the same properties as a conventional pole with two loops. In every planar theorized surface (6) that cuts vertically every loop of the magnetic lines, exactly at the points where the magnetic lines curve leaving every polar area (3) and are located in the named neutral zone (5) of the magnet, every magnetic line has an opposite vector and direction from what each one had at its neighboring polar area (3). All lines at that planar theorized surface (6) that cuts there vertically the magnetic lines are of opposite polarity from the neighboring pole (3) they belong. We name then, these dynamic lines, specifically for their recognizable identification as front/rear bundle of dynamic lines (4).

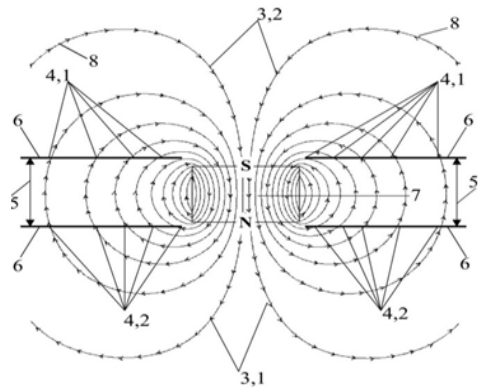


Figure 1: Exploitation of the rest of the polar properties of the loops of a dipole exploiting the front and the front/rear bundle of the dynamic lines.

This bundle is also in that area (6) always of opposite polarity than the adjacent pole (3), in which these are also present and differ from this part of the dynamic lines coming from the adjacent polar region (3) and which for their recognizable identification are particularly designated as front bundle of dynamic lines (3). At the north (1) pole (3) of a dipole (7), which is designated as front bundle of dynamic lines (3), the adjacent front/rear bundle of dynamic lines (4) coming from a perpendicularly considered level (6) jointly from the two adjacent loops (8) (8) of the neutral zone (5) are of south polarity (2) and this as (4, 2) is identical to the south (2) pole (3) of the dipole (7). The respective applies to the south (2) pole (3) of the same dipole (7), which is also designated as front bundle of dynamic lines (3) and the adjacent front/rear bundle of dynamic lines (4), which comes from a vertically considered level (6) jointly from the two adjacent loops (8) (8) of the neutral zone (5) is of north (1) polarity (4,1) and is identical to the north (1) pole (3) of the dipole (7). Because then of the fact that every dipole (7) has two poles (3, 1 and 3, 2) the invention exploits construction wise the areas (5) of every loop (8) of every dipole (7), utilizing the differentiation that the dynamic lines attain in their magnetic vector and direction in space, when they penetrate in the neutral zone (5) of the magnet (7) so that every dipole (7) has two poles (3, 1 and 3, 2) but every loop (8) of the dipole (7) possesses two more beneficially exploited construction wise polarities (4, 1) and (4, 2).

Figure 2 shows a second case, wherein due to the nature of magnetism and since the dynamic lines always select the closest and easiest way or means to pass through both magnetic materials that are nearby to close a magnetic loop (8A) as dynamic lines, these corresponding results are achieved by positioning a dipole (9) in marginal adjacent rear position from a front dipole (7), where the front pole of the rear dipole (9) is of the same polarity, meaning north (1) with the rear polarity of the front dipole (7) and one front bundle of the dynamic lines (8A) of the rear dipole (9), unifies with the bundle of dynamic lines of the loop of the front dipole (7) so that a single and uniform loop of magnetic lines (8A) is formed that penetrates both dipoles (7, 9). If the front bundle of dynamic lines (3, 2) is designated as the one coming from the front dipole (7), then the total front bundle of the rear dipole (9) will be designated as front/rear bundle of dynamic lines (4A, 1), executing the similar operations as in the first case of figure 1 (4, 1), referred to above as one dipole (7) only, with the exception that the front/rear bundle (4A, 1) is emitted from the front bundle of dynamic lines of the rear positioned dipole (9). The front/rear bundle of dynamic lines (4), of any polarity, is emitted spherically in the three-dimensional space from a cylindrical dipole and thus, as long as the application exploits this property of the dipoles.

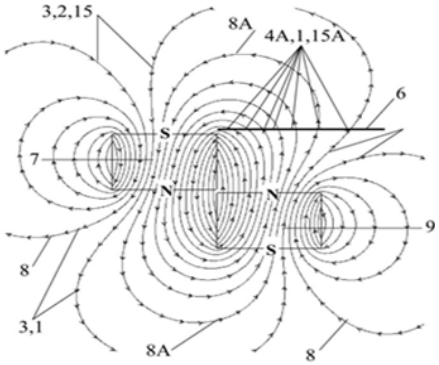


Figure 2: The front and the front/rear bundle of the dynamic lines with a front (7) and a rear dipole (9).

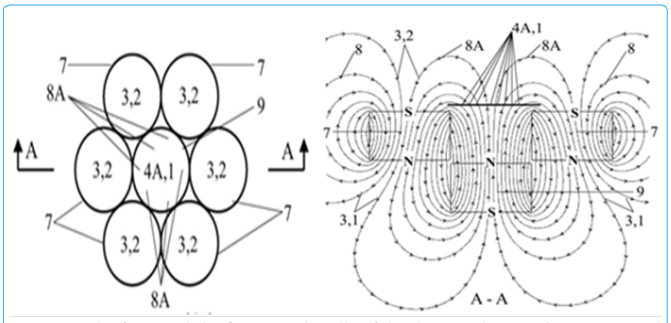


Figure 3: The front and the front/rear bundle of the dynamic lines with two marginal front (7,7) and a central rear dipole (9).

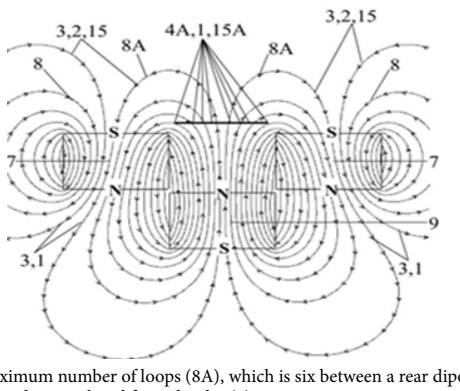


Figure 4: Maximum number of loops (8A), which is six between a rear dipole (9) and six marginally adjacent placed front dipoles (7).

This property will be present also in cases not mentioned in the description and the figures. However, its property will not be mentioned for clarity reasons, when this will always have secondary role and not primary, whereas when it has a primary role, it should always be referred to in the text and the drawings.

Figure 3 shows the front/rear bundle of dynamic lines (4A, 1) being formed from two front dipoles (7) and one rear dipole (9), where there are two loops (8A) (8A) passing through the two front dipoles (7) and the rear dipole (9). Thus, there are various combinations, wherein loops of the type (8A), passing through two magnetic dipoles, may be present. In the case of three front dipoles (7) and a rear dipole (9), three loops (8A) etc. will be formed and the maximum number is six loops (8A), between equally sized proper cyclic cylindrical magnetic dipoles, namely when there are six front dipoles (7) in the front and around a rear dipole (9), with p6m symmetry, of hexagonal planar mesh of plane tiling, as shown exemplarily in figure 4. Figure 3 and the above referred as in figure 4 is exemplary, since (4A) may contain two, or three or up to six loops (8A), which will depend on how the magnetic dipoles are arranged in the construction of each magnetic arrangement. The exploitation of all the polar properties produced by the dynamic lines of the loops of the magnetic lines of a dipole, either by the manner of figure 1, or by the manner of figures 2, 3 or 4 constitutes the constructional inventive step of all the arrangements of the invention. In any of the mentioned arrangements, where one arrangement is opposite to the other, the above-mentioned exploitation of the various cases of figure 1 and of the figures 2, 3 and 4 is used, wherein the front/rear bundle of dynamic lines, of figure 1 (4), is exactly similar in operation as the front/rear bundle of dynamic lines of figure 2, 3 and 4 (4A). Their only difference is in the intensity, namely in figures 2, 3 and 4, the (4A) is more powerful in magnetic intensity than that of figure 1 (4). As regards the functions of the interactions, these are similar. 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 direction of the magnetic constructions, which remain always confronted and parallel to each other. The guide with the two magnetic constructions, which interact thereon 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 interdependencies, namely three first-time emerged different multi-planar polarities in-between two magnetic bodies, which create correspondingly three emerged different interactions with also three first-time emerged different fields. All these new interdependencies 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 Figures 5, 6 and 9. 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 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 Figures 7, 8 and 10.

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 and even more.

The multiple interactions in detail describing the many possibilities totaling more than 96 interactions vs. the known two of the state of the art

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.

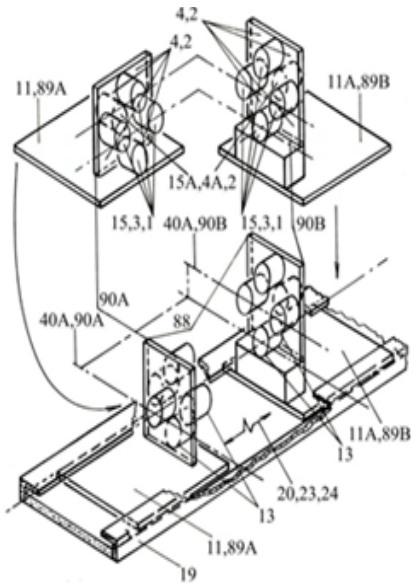


Figure 5: The 3 + 3 = 6 magnetic interactions arrangement of symmetrical placement of magnets (numbering non- referable in all the figures).

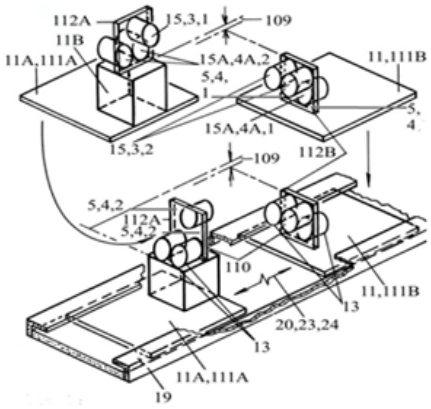


Figure 6: The 3+3 = 6 magnetic interactions arrangement of symmetrical placement of magnets (another different symmetry producing the same results as Figure 1).

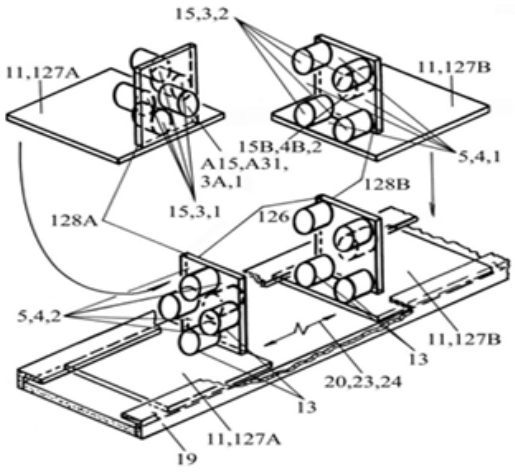


Figure 7: The 5 + 5 = 10 magnetic interactions arrangement of symmetrical placement of magnets.

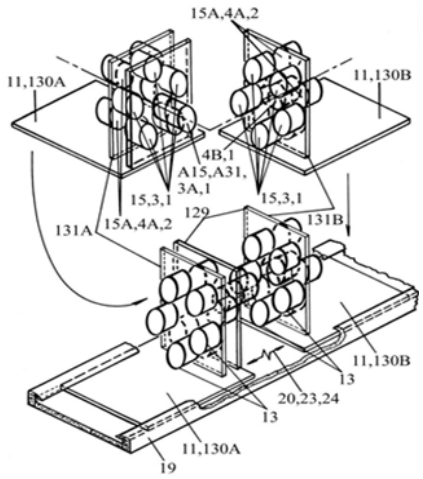


Figure 8: The 5 + 5 = 10 magnetic interactions arrangement of symmetrical placement of magnets (another different symmetry producing the same results as Figure 3.

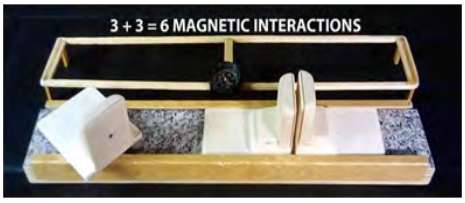


Figure 9: The 3+3 = 6 magnetic interactions image.

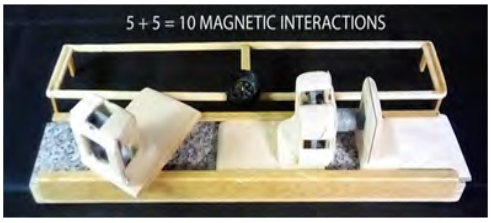


Figure 10: The 5+5 = 10 magnetic interactions image.

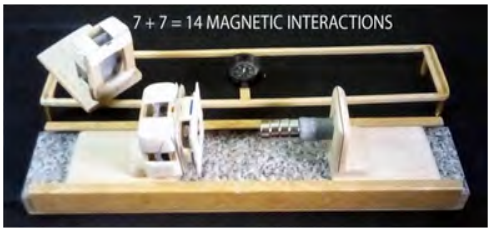


Figure 11: The 7+7 = 14 magnetic interactions image.

Figure 12: The 9 + 9 = 18 magnetic interactions image.

Figure 13: The 11 + 11 = 22 magnetic interactions image.

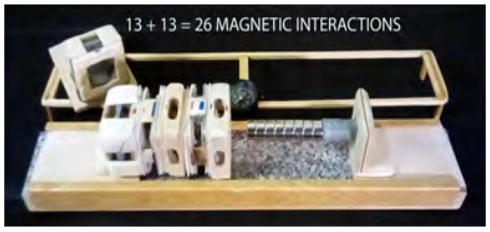


Figure 14: The 13 + 13 = 26 magnetic interactions image.

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

Brief explanation of the multi-effects of each of the interactions

a) All interactions apart from the nearest distance interactions of attraction and repulsion are completely new in magnetism. In this sense, each and every one according to the position found has a different and unique function and special characteristics.

b) For example: The "stable balance" interaction found between the "attraction no contact" and the "repulsion" interactions has different functions according to the position it holds within the multiple interactions scheme. When the "attraction no contact" interaction is in the outside distance of the multiple interactions ranging towards infinity, the "stable balance" has an easily unlocked function allowing the constructions to easily separate towards infinity. However, when the "attraction no contact" interaction is in the inside distance of the multiple interactions, the "stable balance" has a locked effect disallowing the constructions to easily separate.

c) Accordingly, each interaction apart from the nearest distance interactions produce unique and different effects in each different multiple interaction scheme.

	State of the Art	Kertsopoulos innovation of multiple interactions						
	Simple interactions	3 Interactions	5 Interactions	7 Interactions	9 Interactions	11 Interactions	13 Interactions	More interactions
Attraction with contact	1	1	1	1	1	1	1	
Unstable balance		2	2	2	2	2	2	
Repulsion		3	3	3	3	3	3	
Stable Balance			4	4	4	4	4	
Attraction no-contact			5	5	5	5	5	
Unstable Balance				6	6	6	6	
Repulsion				7	7	7	7	POSSIBLE
Stable Balance					8	8	8	
Attraction no-contact					9	9	9	
Unstable Balance						10	10	
Repulsion						11	11	
Stable Balance							12	
Attraction no-contact							13	

Table 1: Kertsopoulos innovation of multiple interactions produced: 3+3 and 5+5 and 7+7 nad 9+9 and 11+11 and 13+13=96 in total interactions vs. the known 2 of the state of the art.

	State of the Art	Kertsopoulos innovation of multiple interactions						
	Simple interactions	3 Interactions	5 Interactions	7 Interactions	9 Interactions	11 Interactions	13 Interactions	More interactions
Repulsion	1	1	1	1	1	1	1	
Stable Balance		2	2	2	2	2	2	
Attraction no-contact		3	3	3	3	3	3	
Unstable Balance			4	4	4	4	4	
Repulsion			5	5	5	5	5	POSSIBLE
Stable Balance				6	6	6	6	
Attraction no-contact				7	7	7	7	
Unstable Balance					8	8	8	
Repulsion					9	9	9	

Stable Balance						10	10	
Attraction no-contact						11	11	
Unstable Balance							12	
Repulsion							13	

Table 2: Kertsopoulos innovation of multiple 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 and opposite to the above interactions.

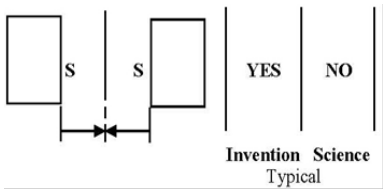
Schematic representation of experiments, overpassing 36 restrictions of magnetism

The column found on the right (as science) has the answer to what science has observed up to now. The column found on the left (as invention) shows what the new experimental achievements answer to the experiment demands listed and is done strictly under the specific technological applications and conditions provided by the "KERTSOPOULOS INNOVATION".

Note: Arrows within the schematic diagrams show only direction of movement of the constructions. In the absence of arrows, no attraction or repulsion occurs for the constructions. The poles retain their own characteristics but with no attraction or repulsion occurring in between them. A new type of a resultant field is created in magnetism!

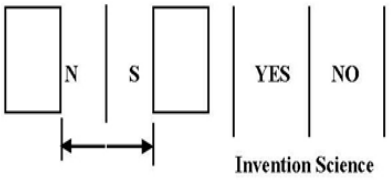
Experiments of case 1 and 2

1) Can two magnetic constructions, which are interacting initially with like poles, according to the intervening distance, attract with a strong attraction force and eventually unite?



Strong attraction achieved

2) Can two magnetic constructions, which are interacting initially with unlike poles, according to the intervening distance, repel with a strong repulsive force unable to unite?



Strong repulsion - no-unison achieved

Existing restrictions of magnetism, which experiment cases 1 and 2 overpass:

The numeric order of restrictions that follows is independent of the experiments' cases numbering. Also, the "field entities" case numbering corresponds to the previous numbered "pole entities" case, i.e. "field entity" case1 corresponds to "pole entity" case1 and also, to experiment case1.

Poles as Entities

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

Over Passed (case 1)

2) Unlike poles can never be made to repel by a change in distance. (Elementary & basic restriction)

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)

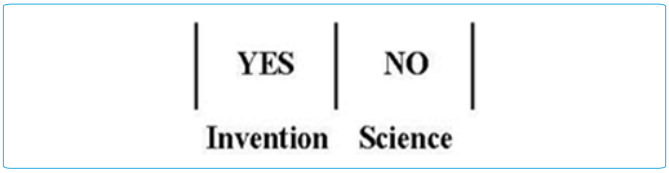
Over Passed (case 1)

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

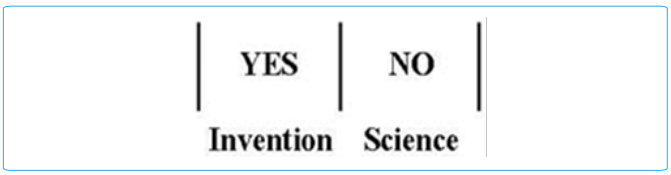
Over Passed (case 2)

Experiments of cases 3 and 4

3) **Case 1:** experiment of two like poles strongly attracting each other and uniting but with the condition of a complete absence of a repulsive field?



4) **Case 2:** experiment of two unlike poles strongly repelling each other unable to unite but with the condition of a complete absence of an attractive field?



Existing Restrictions of Magnetism, which experiment cases (3) and (4) overpass:

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).

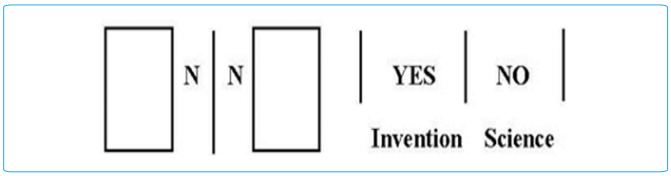
Over Passed (case 3)

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)

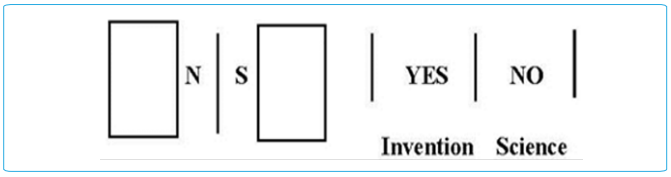
Experiments of cases 5 and 6

5) Can we have the condition of two magnetic constructions of like poles each with a strong intensity, and when we bring them together at a specific close distance to observe a complete absence of any repulsive magnetic interaction and experience the result of a complete rest?



We have a complete absence of a repulsive magnetic field between the poles.

6) Can we have the condition of two magnetic constructions of unlike poles each with a strong intensity, and when we bring them together at a specific close distance to observe a complete absence of any attractive magnetic interaction and experience the result of a complete rest?



We have a complete absence of an attractive magnetic field between the poles.

Existing restrictions of magnetism, which experiment cases (5) and (6) overpass:

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)

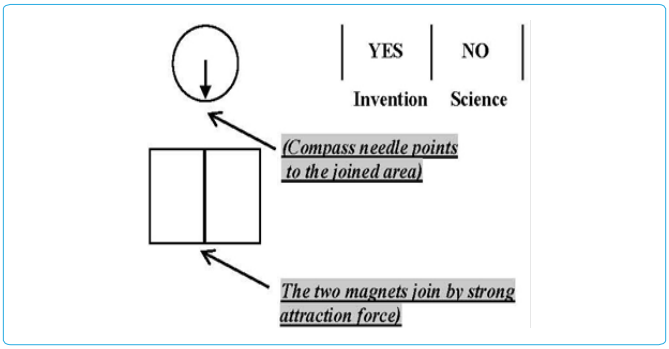
Over Passed (case 5)

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)

Experiment of case 7

7) Two magnets join by attraction. Can the compass needle point to their joined area?



Existing restrictions of magnetism, which experiment case (7) overpasses:

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

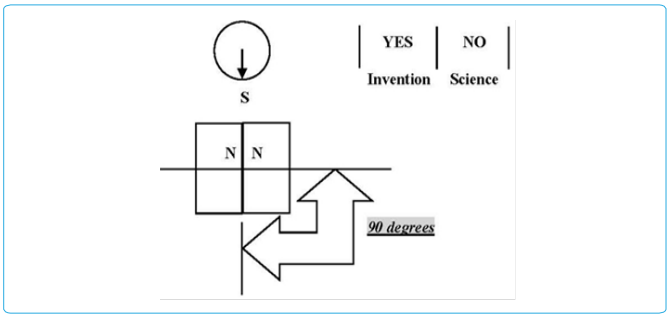
14) It is impossible to produce or create magnetic field lines of force, which become or behave with polar attributes or characteristics, in the outside vicinity and area, which is near the attraction of two poles. (Elementary & basic restriction)

Over Passed (case 7)

Experiment of case 8

8) According to case (7), can we have similar poles united by a strong

attractive force and form new poles at their joint of unison, in a 90 degrees orientation between their axial relations?



Existing restrictions of magnetism, which experiment case (8) overpasses:

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)

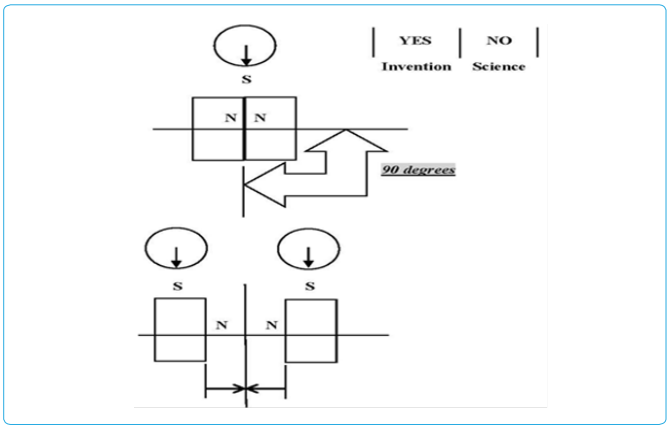
Fields as Entities

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 thirdly, 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)

Experiment of case 9

9) According to cases (7) & (8), if two poles unite to form a pole, can we then have the condition of a pole being able to be divided into two poles, which are of the same polarity, and also observe that there are two more poles of opposite polarity, at 90 degrees to their orientation?



Existing restrictions of magnetism, which experiment case 9) overpasses:

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 9)

Fields as Entities

(19) A magnetic field 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 9)

Experiment of case 10

10) Can we create and produce physical magnetic field-pole/s from physical, actual, real poles?

The above would mean that at the outward magnetic field outside the actual poles, and at specific location/s, a planar field barrier exists, which acts and behaves as a pole would, within the magnetic field vector. This barrier however (magnetic field-pole/s), acts on the magnetic field, as a real pole would, but the location/s, it is found, is/are outside the limits of the real poles that are responsible for its existence. It is a case where the inward-outward barrier of the pole's physical limits are extended beyond their limits and create a physical barrier beyond their jurisdiction, within the vector location of the magnetic field.

Existing restrictions of magnetism, which experiment case 10) overpasses:

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 10)

Fields as Entities

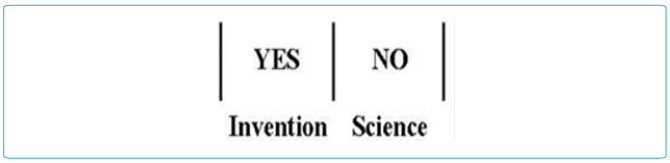
22) Within an outward magnetic field's vector, which is produced as a result of two physical magnetic poles, we cannot have a creation of a new physical pole that however will act as a magnetic field/pole. As

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 10)

Experiment of case 11

11) Can we create a physical magnetic field-pole and suddenly stop the intensity and direction of a repulsive field, even at a high intensity level, while the poles are going against each other, but are still apart?



Existing restrictions of magnetism, which experiment case 11) overpasses:

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 intensitylevel, 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 11)

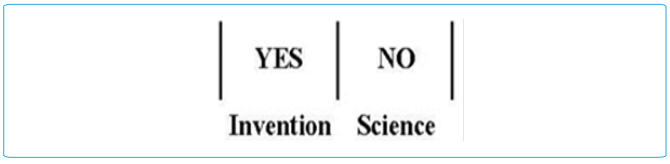
Fields as Entities

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 11)

Experiment of case 12

12) Can we create a physical magnetic field-pole and suddenly stop the intensity and direction of the decay of a repulsive field?



Existing restrictions of magnetism, which experiment case 12) overpasses:

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 word 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 12)

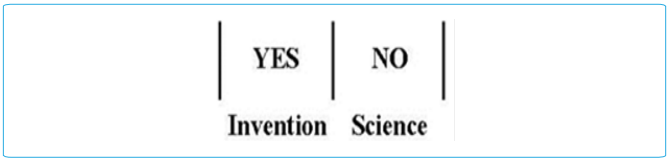
Fields as Entities

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 12)

Experiment of case 13

13) Can we create a physical magnetic field-pole and suddenly stop the intensity and direction of the decay of an attractive field, while the poles move apart and away from each other, within an attractive field?



Existing restrictions of magnetism, which experiment case 13) overpasses:

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 13)

Fields as Entities

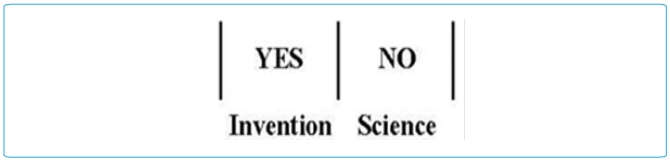
28) When two poles go away from each other, within an attractive field, it is impossible for this field to suddenly stop its existence, because it should continuously decay to nil conditions to infinity. (Elementary & basic restriction)

Over Passed (case 13)

Experiment of case 14

14) Can we also create the phenomenon in case 11) in an attractive field situation?

This would mean that two poles producing a strong attractive field, are coming close together and as they come close to unison, where the field has a great intensity, the physical magnetic field-pole,suddenly stops the intensity and direction of the field and it is impossible for the poles to unite.



Existing restrictions of magnetism, which experiment case 14) overpasses:

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 14)

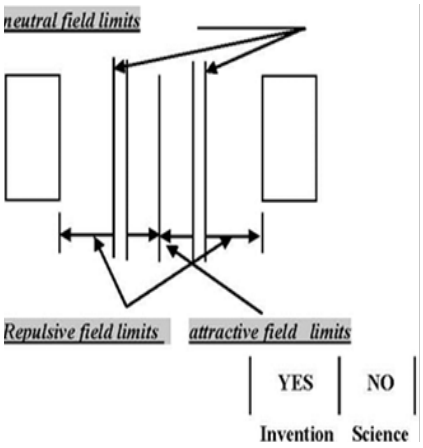
Fields as Entities

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 14)

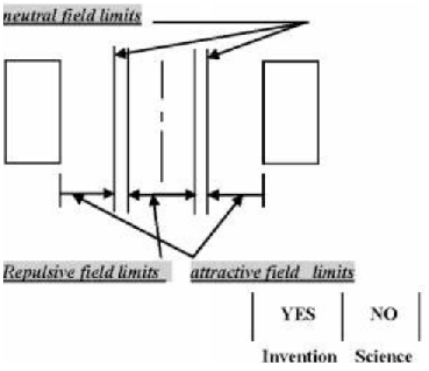
Experiments of cases 15 and 16

15) Between two magnetic constructions calibrated in their orientation to always face each other, can we observe, according to the distance between them, the existence of a three interactions type-magnetic field:attractive-neutral-repulsive?



16) Can we produce a field order opposite to case (15)?

Meaning that: between two magnetic constructions calibrated in their orientation to always face each other, can we observe, according to the distance between them, the existence of a three interactions



type-magnetic field in the order of: repulsive-neutral-attractive? Existing restrictions of magnetism,which experiment cases (15) and (16) overpass:

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 type magnetic pole arrangement possibility is impossible to exist.(Elementary & basic restriction)

Over Passed (case 15 & 16)

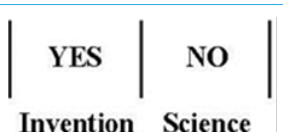
Fields as Entities

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 type magnetic field in the order: attractive-neutral-repulsive or repulsive-neutral attractive. (Elementary & basic restriction)

Over Passed (cases 15 & 16)

Experiment of case 17

17) Can we see in cases (15) and (16) above, a complete rest of the poles at the location of the neutral field limits, where the intensity and direction of the resultant field would be nil, although to the outward or inward positions of the poles, which leave from the neutral field, we observe strong opposing magnetic fields?

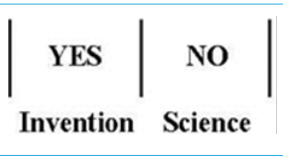


Experiment of case 18

18) If two poles of case 15) rest at the neutral field position, with nil magnetic interaction between them and we lightly displace them, can we observe a strong outward repelling effect, to the repulsive field, and a strong inward attracting effect, to the inward direction of the attractive field and in case 16) the opposite to case 15) inward-outward effects?

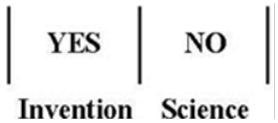
Experiment of case 19

19) Can we then create neutral magnetic fields, within the magnetic field vector, existing between poles and also make them act as a magnetic field pole condition that ignites, but also stops the behaviour of two opposing fields?



Experiment of case 20

20) Can we have two basic types of neutral magnetic fields so we can be able to control all required design schemes in the order of: 2-WAY DYNAMIC, 1-WAY DYNAMIC?



Existing Restrictions of Magnetism,which experiment cases 17 to 20 overpass:

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 as in case 15 or the opposite to the above interactions as in case 16). (Elementary & basic restriction)

Over Passed (Cases 17 to 20)

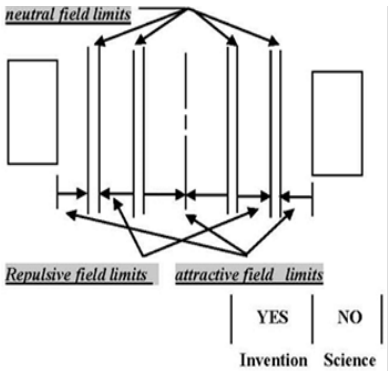
Fields as Entities

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 to 20)

Experiments of cases 21, 22 and 23

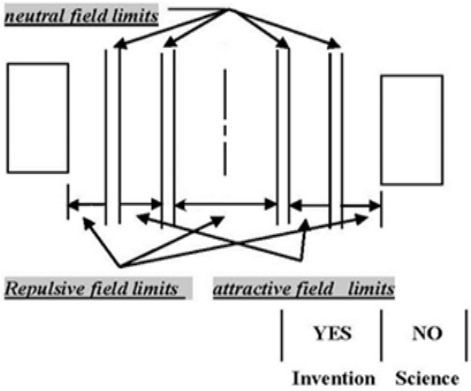
21) Between two magnetic constructions calibrated in their orientation to always face each other, can we observe, according to the distance between them, the existence of a five interactions type-magnetic field: ***attractive-neutral-repulsive-neutral-attractive***?

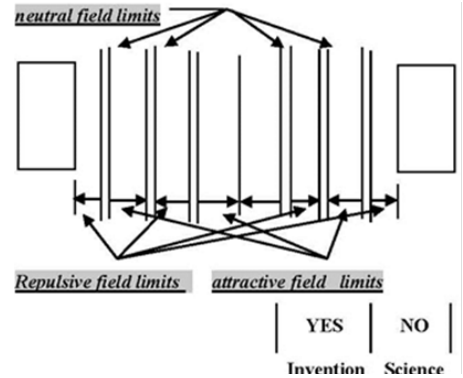


(22) Can we produce a field order opposite to case 21)? Meaning that: between two magnetic constructions calibrated in their orientation to always face each other, can we observe, according to the distance between them, the existence of a five interactions type-magnetic field in the order of:

repulsive-neutral-attractive-neutral-repulsive?

23) Between two magnetic constructions calibrated in their orientation to always face each other, can we observe, according to the distance between them, the existence of a seven interactions type-magnetic field: ***attractive-neutral-repulsive-neutral-attractive-neutral-repulsive?***





Existing restrictions of magnetism, which experiment cases 21 to 23 overpass:

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 heterogeneous 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 interactions type magnetic pole arrangement possibility is impossible to exist. The same stands for the seven interactions type, the nine, the eleven, the thirteen and all other added multiple interactions types and polarities. (Elementary & basic restriction)

Over Passed (Cases 21 to 23)

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 five interactions type magnetic field in the order: attractive-neutral-repulsive-neutral-attractive or the opposite to the above, which is repulsive-neutral-attractive-neutral-repulsive. Also, it is impossible to achieve a seven interactions type magnetic field in the order: attractive-neutral-repulsive-neutral-attractive-neutral-repulsive?The same stands for the opposite seven interactions to the above seven or the nine interactions type field, the eleven, the thirteen interactions type field and all other added multiple interactions types and polarities. (Elementary & basic restriction)

Over Passed (Cases 21, 22 and 23)

Result

Three answers to general industrially and also, scientifically orientated questions

1) "Exactly what new antagonistically, does the new technology bring to the current state of the art?" Answer: The new technology achieves: a) cancelling and over passing of all known restrictions of the principles of magnetism b) creation of numerous new model/standard polar and field product entities c) production of magnetic containment (being absent from the current state of the art).

2) "In what ways can the new technology improve on the magnetic products that already exist?"

Answer: The new technology can drastically improve on the magnetic products currently available, by supplying the designers with numerous, new, useful, applied technological scientific tools and concrete new magnetic polar and field product entities, with their accompanying innovative design data, by which, the constructed polar attributes and also the magnetic field lines/lines of force will become fully contained, in a successful for each case (and also unprecedented) manner, for the applied magnetics technology. Therefore, the existing products will be improved (when and if needed) with more innovative technical specifications, possessing totally new, more efficient properties, attributes, behaviours and functions.

For example: There is no way and/or manner for the current state of the art to design, construct and build a "none-touch resultant attractive/repulsive physical magnetic field between two poles". This physical magnetic field is only one of the many new types of fields created for the first time by the feats of this invention, where one pole attracts the other pole but in the near distance between the poles, there is a repulsive field, not allowing the poles to join. Other words, at their closest in-between distance, the poles repel each other and at the greater distance, they attract and pull each other, unable though to join. This field will be realized and applied for the first time in technology, as a physical magnetic field for lifting, dragging, clamping, moving compartment's joining with none-touch effect, where the "none-touch attractive field", shall be desired and wanted by the marketing needs, enhancing the design specifications of the analogous products. It will also be used for the first time as an electromagnetic "none-touch attractive field", producing numerous important improvements on existing electromagnetic products, simultaneously providing a new model/standard for the designing of totally revolutionary new products.

Of course, the existing technology can easily develop and fully incorporate the new technology, by using and adapting.its existing magnetic products to the new practices and applications that will evolve, because the new development is multifunctional, multisided and extremely flexible, providing open architecture, which creates inter-relations and inter-corporations with the existing technology. The invention is a whole complete system that makes "possible", the "impossible to be done in any way in magnetism", providing only "solutions" to "unsolved problems", making the impossible to be done a reality, in a more simple, feasible and innovative way, than expected. From the micro cosmos of quantum physics and nanotechnology to the macro cosmos of the heavy industrial machinery to the nuclear and chemical laboratories of particles exploitation, the feats of the invention will produce successful progress. The invention does not/and shall not create problems, especially wherever the solutions have already been given, by the current state of the art.

3. "What types of consumers would be the beneficial recipients of this invention?"

Answer: As it follows from the two previous answers, the new applied technology of the invention involves, affects and activates all technological and scientific branches of magnetism of both applied and theoretical fields. The reasons being, that its feats not only antagonize the fundamental-foundational model, standard know-how of the current state of the art, but also the development and practical aspect of the applied technology and science with their existing accompanying methodologies. Consequently, every heavy, middle or light industry, every scientific and technological research and/or development centre or organization, every commercial and consumer chain and finally everyone who as a consumer, professional, scientist, researcher or designer is seriously involved with magnetism in any way, are the type of consumers who will see the benefits of this invention.

Proof of accomplishment of the experiments for viewing over the web and also for viewing all the interactions in action

Please view for each arrangement of multiple interactions as listed above, the author's official Internet secure site, 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". https://magnapeiron.com/budapest/kertsopoulos-budapest-conference.html

Conclusion

Can we conclude that the invention promotes 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 patented 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.

3) The scientific aspect of the invention gives the opportunity for numerous studies to be accomplished and also record in a scientific manner the new principles of magnetism that the invention reveals as existing in magnetism. Up to now, the international bibliography does not cover in the principles of magnetism each and every new polar and field entity achieved by the invention, with its specific function and characteristics. For example: In the state of the art we have like and unlike poles and the like poles repel and the unlike poles attract. These are two principles of magnetism. We do not however, have like-unlike poles and unlike-like poles simultaneously, the first resting in stable balance and the second resting in unstable balance. This addition, would involve four added principles; two principles describing that there can exist simultaneously like-unlike poles and also unlike-like poles and two principles describing that the like-unlike poles rest in stable balance and the unlike-like rest in unstable balance. The above said is just a general example of the wide spectrum of scientific work that will certainly arise from the scientific revelations that are given by the invention in all its aspects.

4) All the experimental data are here for use by any scientist to experiment in the laboratories and produce theoretical data that will be derived by the experimental devices of the invention. Going from the practical, in our case the experimental devices of the invention, to the theory of the matter is the most assuring manner in science that success will come, for certain.

5) 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. The "stable balance" interaction is used in all three cases shown below in photos and videos:

Model of suspended in the air building [15].

Model of a one leg triangular future building [16].

Model of elevated in the air building [17].

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References

1. Kertsopoulos GK (2016) Magnetic system of three interactions. USPTO (U.S.A.) Patent: US 9,418,781 B2.
2. Kertsopoulos GK (2016) Magnetic system of three interactions. EPO (European Union) Patent Bulletin 2016/20: EP2842140 B1.
3. Kertsopoulos GK (2016) Magnetic system of three interactions. CIPO (CANADIAN) Patent CA 2869680.
4. Kertsopoulos GK (2013) Magnetic system of three interactions. International protection published by the International office of patents WIPO-PCT, bearing the No WO/2013/136097.
5. Kertsopoulos GK (2015) Magnetic system of three interactions. IP AUSTRALIA Patent 2013234102.
6. Kertsopoulos GK (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).
7. Kertsopoulos GK (2013) MAGNETSYSTEM AUS DREI WECHSELWIRKUNGEN.Patent Germany 60 2013 007 667.7.
8. Kertsopoulos GK (2013) Magnetic system of three interactions. United Kingdom Patent EP13719233.2.
9. Kertsopoulos GK (2013)SYSTÈME MAGNÉTIQUE À TROIS INTERACTIONS. French Patent EP2842140.
10. Kertsopoulos GK (2013) Magnetic system of three interactions. Switzerland Patent EP02842140.
11. Kertsopoulos GK (2017) Magnetic System Of Multiple Interactions (Volumes I & II). Kertsopoulos Publishing.
12. Kertsopoulos GK (2018) Innovation article: 36 overpassed restrictions of magnetism achieved by the 96 multiple magnetic polarities-interactions performed by the Kertsopoulos world patented invention vs. the known two. Advances in Nanoscience and nanotechnology.
13. "MAGNAPEIRON" Kertsopoulos Magnetism Forums.
14. Magnetic Devices of the Kertsopoulos Invention.
15. https://www.youtube.com/watch?v=TvS-VKScJ3Q.
16. https://www.youtube.com/watch?v=ClZyYj6QxVI.
17. https://www.youtube.com/watch?v=H0XcdD1isvU.

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