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(54) **Podium construction for temporary spectator seating**

(57) Podium construction for temporary spectator seating comprising a plurality of modules and a plurality of seats, characterized in that said modules have a compact horizontal cross section (lack a substantial length direction) and in that each module is connected to exactly one seat.

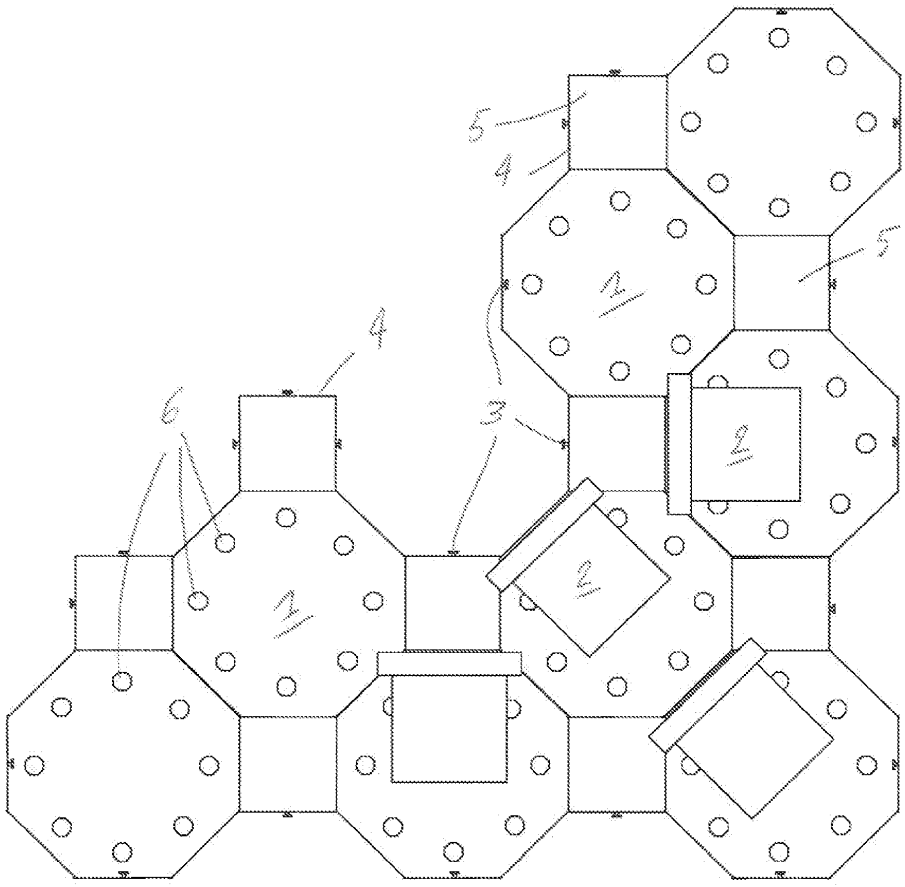

Figure 3

EP 2 540 935 A1

Description

FIELD OF THE INVENTION

[0001] The present invention concerns a podium construction for temporary spectator seating.

BACKGROUND OF THE INVENTION

[0002] With the increasing number of elderly people and the increased activity of elder people, there is an increased demand and need for appropriate comfortable spectator seating at large outdoor events such as cycling races, processions or other manifestations. Additionally, with increasing crowds assisting manifestations there exists a need for guiding spectators fluently from and to the event in order to ensure maximum safety. Podium constructions for temporary spectator seating are very suited to allow elderly to enjoy outdoor events and are beneficial in controlling movement of large groups of people as these have an important buffering function.

[0003] A large number of constructions for temporary spectator seating are known in the art all varying in ease of assembly and disassembly, compact storage capability, transportability and spectator comfort. WO 01/06894 discloses a podium construction for temporary spectator seating with individual theatre seats that can be mounted on a common longitudinal frame. WO 2008/068517 discloses a modular podium comprising a support frame work carrying a rail whereon monocoque modules providing seats are mounted.

[0004] While the known podia are rather well-suited to be provided along straight roads or around a central venue, it has been experienced difficult to provide podia along roads comprising street decorations such as planters or a plurality of traffic signs. Moreover such podia can not be positioned at the inner curve of street corners without severely limiting spectator sight as the back of a first podium will always face the side of an adjacent second podium extending angularly in view of the first podium, such that spectators seated on the second podium have only limited views.

[0005] Hence it will be appreciated that there remains a further need for alternative and improved podium constructions for temporary spectator seating, especially for podia having a high flexibility in dimensions and number of seats.

DESCRIPTION OF THE INVENTION

[0006] The present invention concerns a podium construction for temporary spectator seating comprising a plurality of modules and a plurality of seats, characterized in that said modules have a compact horizontal cross section (lack a substantial length direction) and in that each seat is specifically associated to one module.

[0007] Preferably at least two of said modules have a different height.

[0008] According to a preferred embodiment of the present invention, said modules have a polygonal horizontal cross section, in particular a hexagonal, heptagonal or octagonal horizontal cross section.

[0009] The different modules preferably comprise means so as to allow connection of one module to another module.

[0010] The seats are preferably provided with means allowing connecting seats provided on adjacent modules to each other, which means are preferably independent of a connection of the seats on the respective modules.

[0011] Preferably, the seats are reversibly connected to the concerned modules.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Fig 1 schematically represents a podium according to the present invention;

Fig 2 represents a view according to arrow P2 in Fig 1;

Fig 3 represents an alternative set up of the podium in Fig 2.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0013] Figure 1 represents a podium construction for temporary spectator seating according to the present invention. Such podium construction essentially comprises a plurality of modules 1 and a plurality of seats 2, wherein each seat 2 is associated to exactly one module 1.

Modules

[0014] The modules of the podium construction according to the present invention are compact in the sense that these lack a definite length direction. This means that the length/width ratio of the modules measured in a horizontal plane of an upright module does not exceed a value of 1,5, preferably does not exceed a value of 1,2 and most preferably is about 1.

[0015] The modules preferably have a polygonal horizontal cross section, whereby hexagonal and octagonal cross sections are highly preferred in terms of flexibility of podium extension and configuration. The cross section preferably is constant over the entire height of each module

[0016] The modules can be manufactured in rigid plastic, metal, wood, composite material or such, wherein materials having high wear resistance such as aluminum, stainless steel or reinforced plastic composites are preferred. Depending on the material wherein the modules are manufacture and in order to stabilize the podium construction the modules can be designed as hollow bodies wherein sand, water or other filler materials can be in-

serted to increase weight and prevent rocking of the modules when in use.

[0017] In order to allow multiple levels of seating on the podium, modules may vary in height.

[0018] The modules are preferably provided with connecting means allowing connecting the modules to each other so as to construct a podium. These means are can for example comprise a tongue and groove joint 3 provided close to the base at the side walls 4 of the modules, although other connection means known in the art can also be applied.

[0019] In case the modules have a octagonal cross section -as represented in figure 2 - additional square or rectangular posts 5 can be provided in between adjacent modules. In this case, the connection means for mutually connecting adjacent modules can be performed by a tongue and groove connection between a post and the adjacent modules.

[0020] The modules further comprise a connector for reversibly mounting a seat unit thereon. Such connector preferably comprises a slot 6 extending longitudinally in the module that is accessible from the center or edges of the top surface of the concerned module.

[0021] This slot can have a round, rectangular or polygonal cross-section, wherein hexagonal or octagonal cross sections are preferred.

[0022] According to another embodiment, the connector for reversibly mounting a seat unit on the module can be part of a so-called bayonet connection.

Seats

[0023] The seats applicable for the podium construction according to the present invention can be of any types such as theatre seats with pivoting seating and fixed back support or more basic seats with a fixed seating surface and a back support.

[0024] According to the present invention, the seats all comprise a connection means allowing connecting exactly one seat on exactly one module. This connection means is preferably a metal or plastic profile 7 having a circumference that corresponds to the above-mentioned cross-section of the slots in the modules such that by sliding the profile in the slot, the seat is reversibly connected to a concerned module.

[0025] By connection is meant all means whereby reversible engagement is realized and as such also comprises the alternative embodiment described above wherein the seat is provided with a part of a bayonet type connector that can cooperate with the counterpart provided on the module.

[0026] Preferably the seats are further provided with a secondary connection means that allow mutually connecting adjacent seats. Such secondary connection can be provided by loop at either the back side of the back support or at the underside of the seating or on the profile. This loop allows connecting seats provided in the modules by inserting a bar or cable through the loops of adjacent seats, thereby avoiding theft the seats when leaving the podium construction unattended. Additionally, when using a bar for connecting the seats to each other, said bars can be used as railing for preventing uncontrolled access to the podium or as guidance for people walking on the podium from or towards their seat.

Podium configuration

[0027] A podium construction according to the present invention is very flexible in terms of configuration and can be configured so as to fit in narrow places or along an incidental trail, without the need to extensively remove traffic signs or without loosing place at the inner curve of street corners.

[0028] As represented in figure 3, the podium construction can be positioned at the inner curve of a street corner without limiting views of the spectators on the podium and without loosing extensive space along the road corner.

[0029] Indeed, due to the polygonal shape and especially the hexagonal or octagonal shape of the modules, they can easily be connected to each other in a overall angular shape. Moreover the hexagonal or octagonal shape of the slots in the modules and corresponding profiles on the seats allow orientating the seats individually from each other to different directions such as to provide optimal viewing angles to spectators.

NUMERICAL REFERENCES

[0030]

1	Module
2	Seat
3	Tongue and groove joint
4	Side walls
5	Posts
6	Slots'

Claims

1. Podium construction comprising a plurality of modules and a plurality of seats, **characterized in that** said modules have a compact horizontal cross section (lack a substantial length direction) and **in that** each seat is associated to exactly one module.

2. Podium according to claim 1, wherein the modules have a cross-sectional length/width ratio not exceeding 1,5, preferably not exceeding 1,2 and is substantially equal to 1.

3. Podium according to claim 1, wherein at least two of said modules each have a different height.

4. Podium according to claim 1, wherein said modules have a polygonal horizontal cross section.

5. Podium according to claim 3, wherein said modules have a hexagonal, heptagonal or octagonal horizontal cross section.

6. Podium according to claim 1, wherein said modules comprise means so as to allow connection of one module to another module

7. Podium according to claim 1, wherein the seats are provided with means allowing connecting seats provided on adjacent modules to each other.

8. Podium according to claim 6, wherein said means allowing connection of seats on adjacent modules are independent of the connection of the seat to the corresponding module.

9. Podium according to any of the preceding claims, wherein the seat is reversibly connected to the concerned module.

10. Podium according any of the preceding claims, wherein the seats of the podium are oriented to different directions.

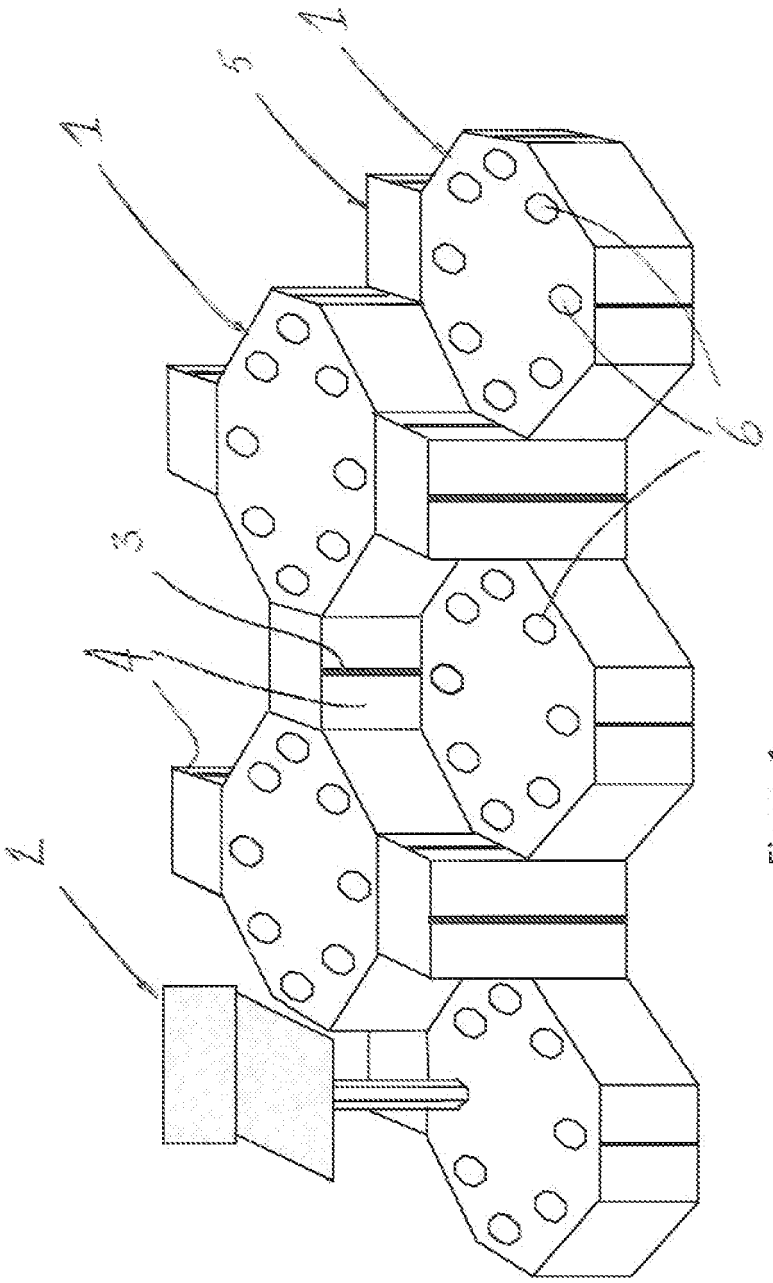

Figure 1

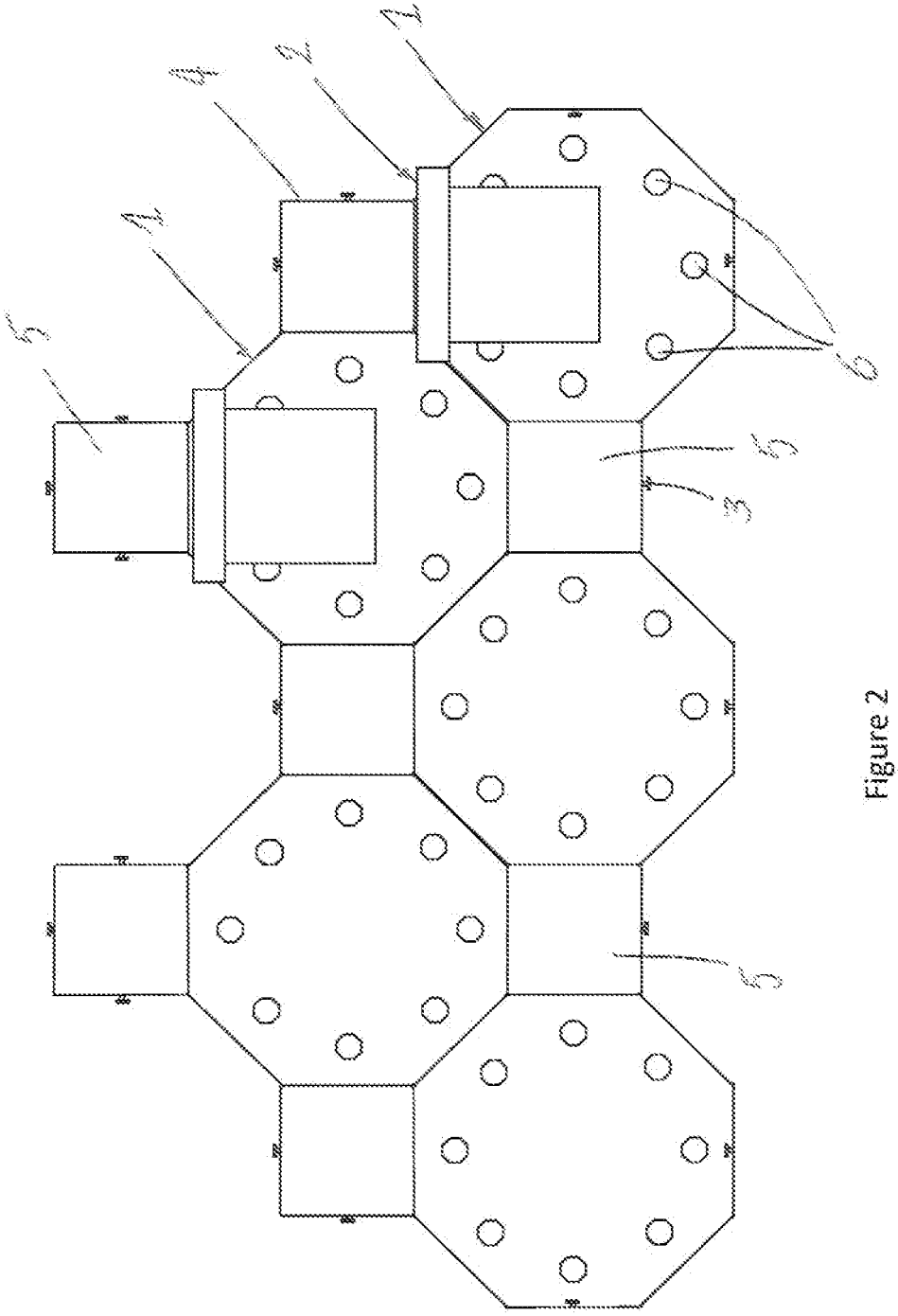

Figure 2

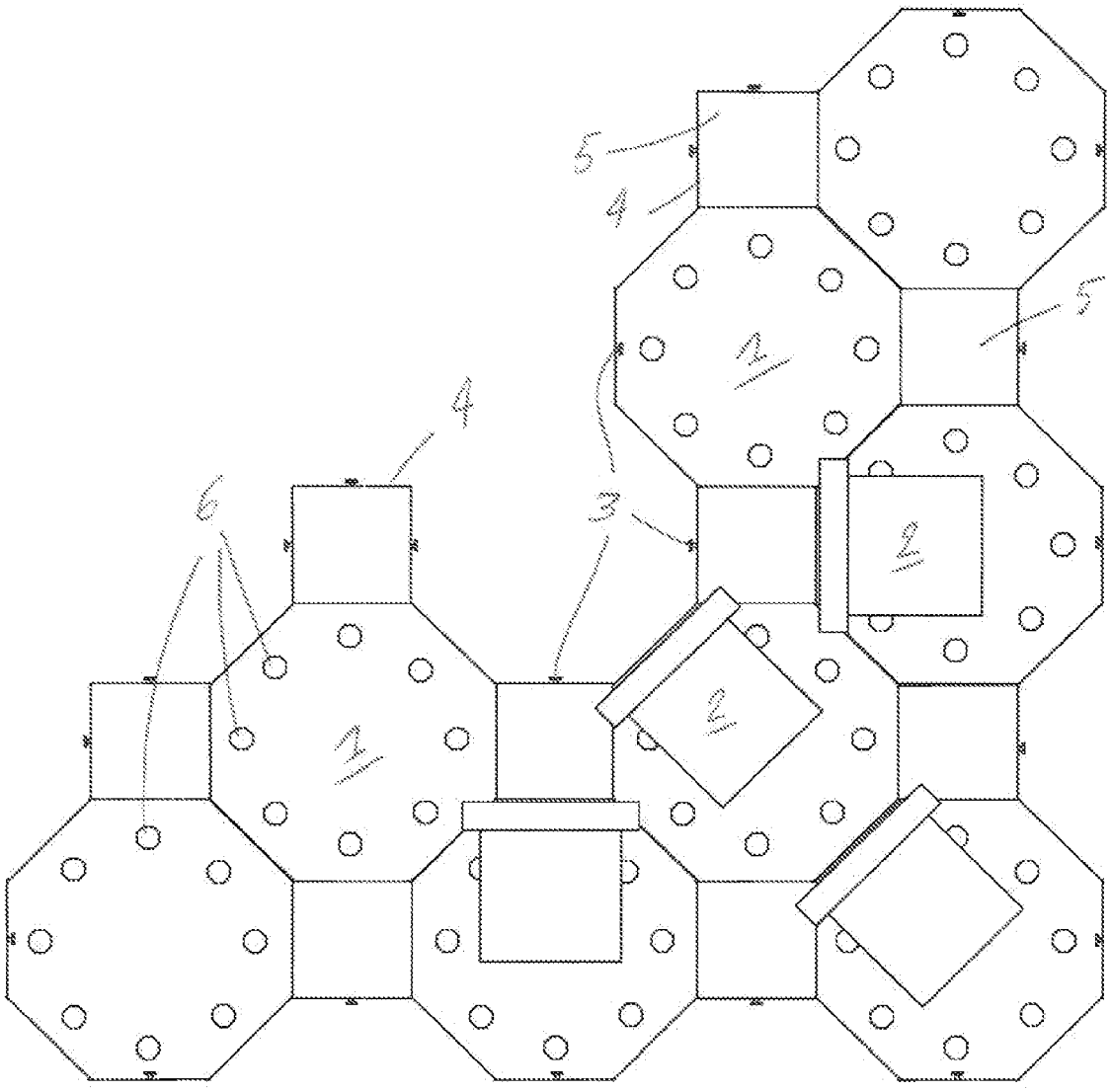

Figure 3

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EUROPEAN SEARCH REPORT

Application Number
EP 11 17 1433

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	US 5 996 286 A (WEST DANIEL C K [US]) 7 December 1999 (1999-12-07) * figures 1, 6 * * column 1, line 22 - line 25 * * column 6, line 31 - line 42 * -----	1,2,4, 6-10 3,5	INV. E04H3/28 E04H3/30
X	SE 8 803 788 L (HOEGANAESMOEBLER AB [SE]) 24 October 1988 (1988-10-24) * figure 1 * -----	1,2,4,9, 10	
Y	US 2004/221517 A1 (JIRELE SCOTT E [US]) 11 November 2004 (2004-11-11) * figure 9 * -----	3	
Y	GB 2 206 141 A (PHILLIPS SYDNEY NOEL) 29 December 1988 (1988-12-29) * figure 11 * -----	5	

TECHNICAL FIELDS SEARCHED (IPC)
E04H A47C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	1 December 2011	Bauer, Josef

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 11 17 1433

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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01-12-2011

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GB 2206141 A	29-12-1988	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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- WO 0106894 A **[0003]**
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