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(54) MID-FILAMENT SPACER

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(**) Term: 15 Years

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(22) Filed: Jul. 13, 2018

(58) Field of Classification Search

(56) References Cited

U.S. PATENT DOCUMENTS

10,240,724 B2 10,324,266 B1	* 6/2019	Advani G02B 7/021
2004/0008525 A1	* 1/2004	Shibata F21K 9/232
2013/0235592 A1	* 9/2013	Takeuchi F21V 23/001
2014/02/07/70 4.1	* 0/2014	362/363 E21K 0/222
2014/0268779 A1	9/2014	Sorensen F21K 9/232 362/249.06
2015/0070871 A1	* 3/2015	
2015/0255440 A1		Hsieh H01L 27/153
		257/88

^{*} cited by examiner

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(57) CLAIM

We claim the ornamental design for a mid-filament spacer, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a mid-filament spacer according to a fifth embodiment.

FIG. 2 is a front side view of the mid-filament spacer depicted in FIG. 1, with the back side view being identical to the front side view.

FIG. 3 is a left side view of the mid-filament spacer depicted in FIG. 1, with the right side view being identical to the left side view.

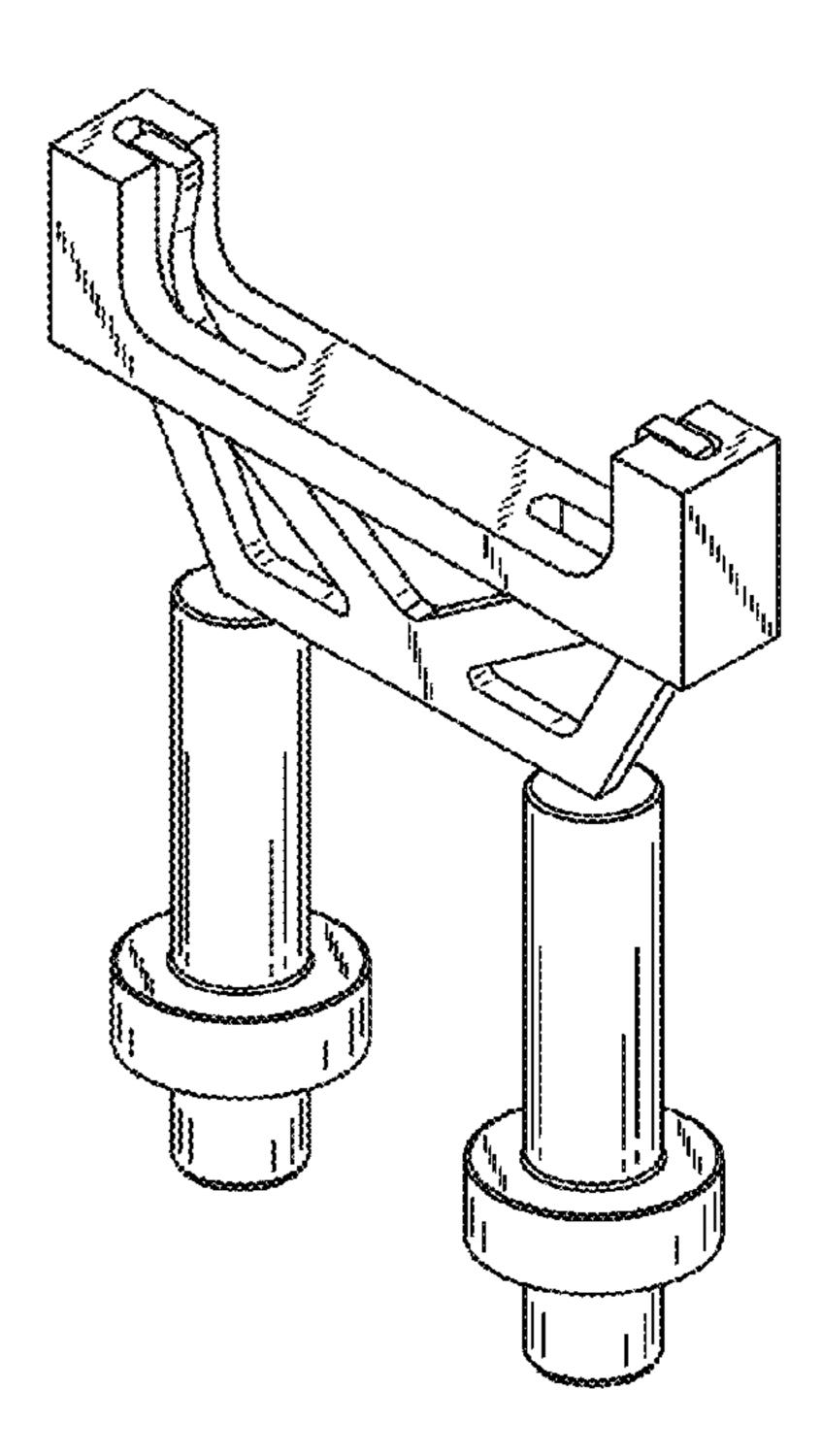
FIG. 4 is a top view of the mid-filament spacer depicted in FIG. 1.

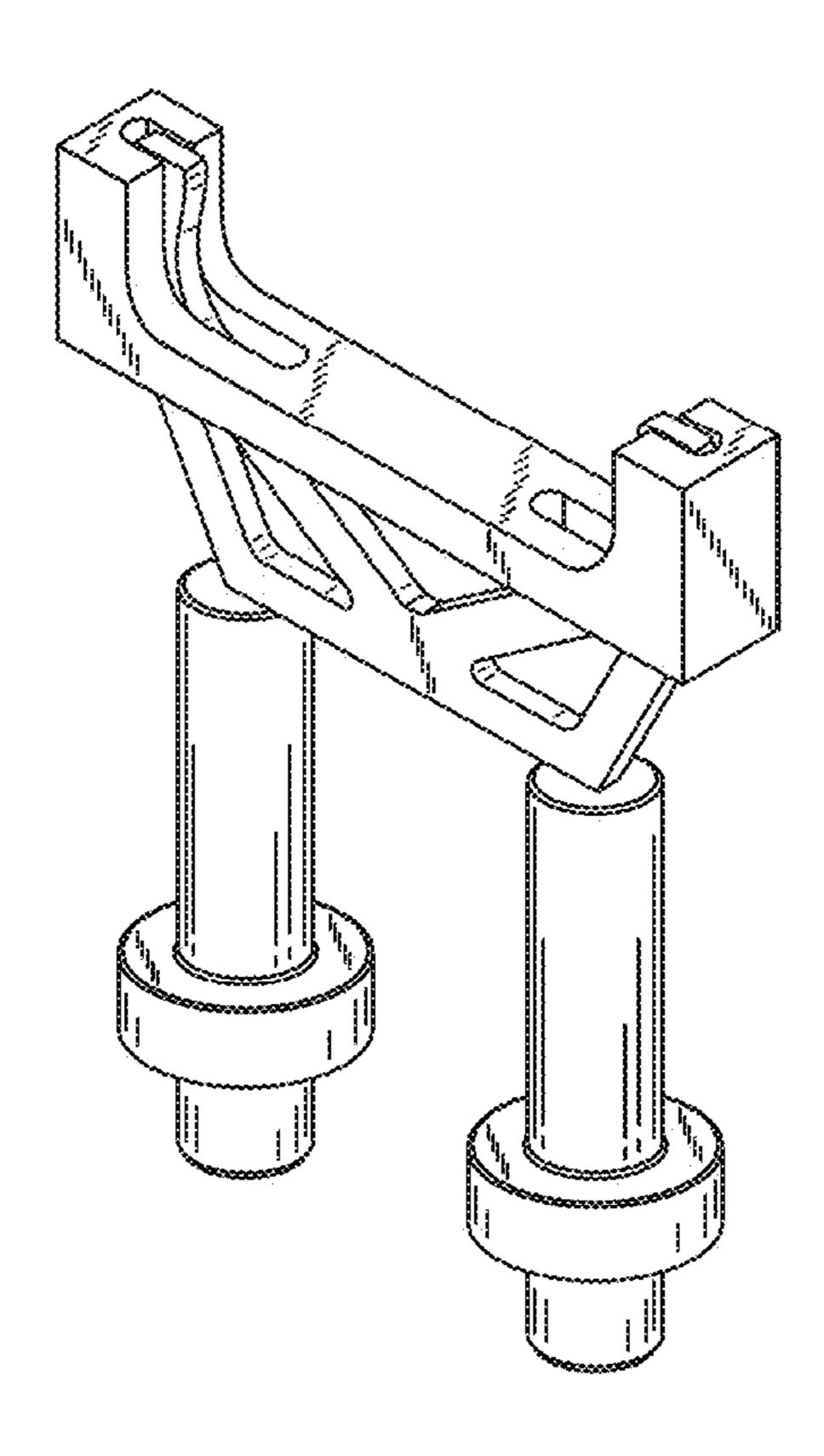
FIG. 5 is a bottom view of the mid-filament spacer depicted in FIG. 1, with dashed lines indicating environmental portions that form no part of the claimed design; and,

FIG. 6 is a bottom view of a sixth, alternative embodiment of the mid-filament spacer, which has top, left, right, front, back and perspective view are identical to those depicted with respect to the embodiment shown in FIGS. 4.

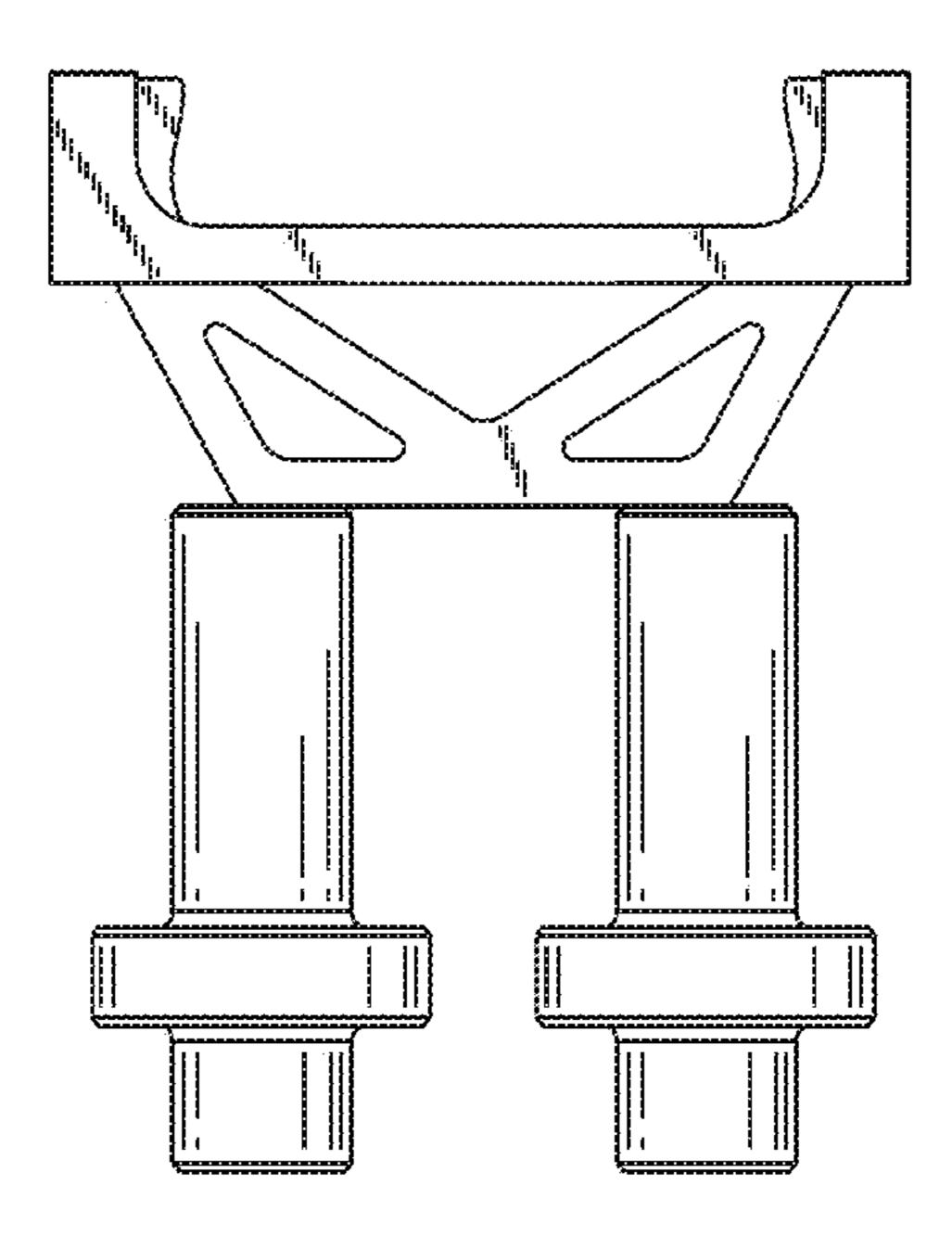
The broken lines immediately adjacent the shaded areas on the bottom views of the embodiments described above represent the bounds of the claimed design and are for illustrative purposes only; the broken lines form no part of the claimed design.

1 Claim, 2 Drawing Sheets





F G 1



F | G . 2

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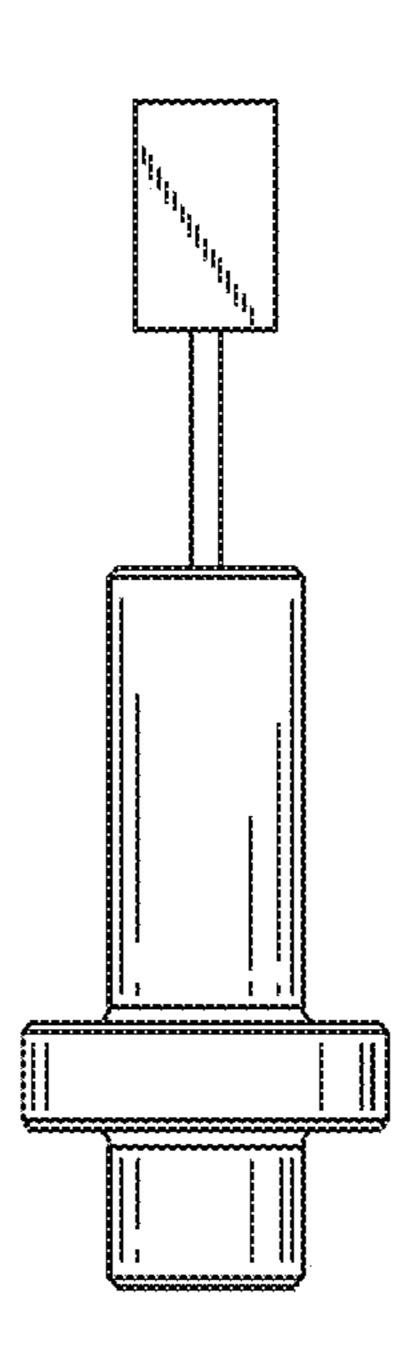
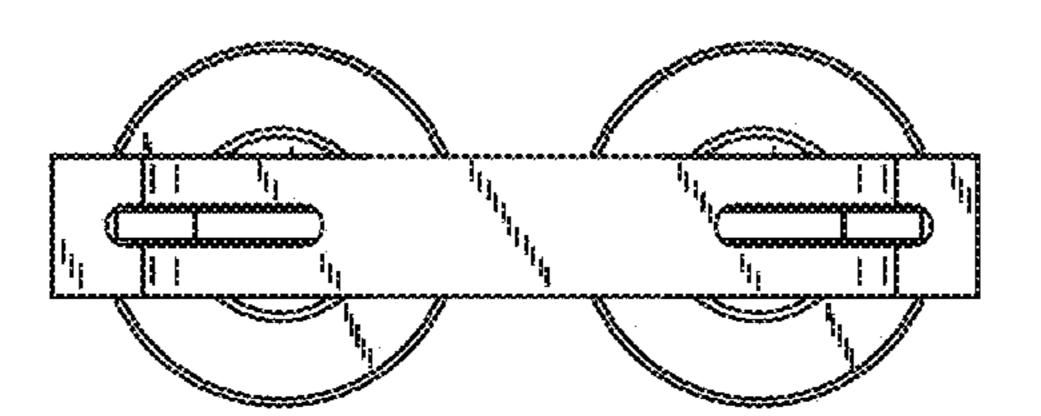
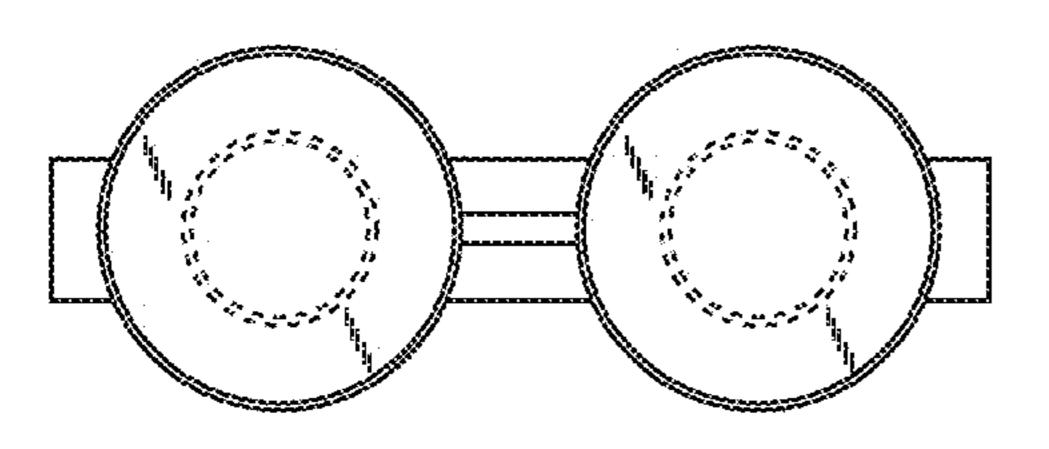


FIG. 3



~ | C . 4



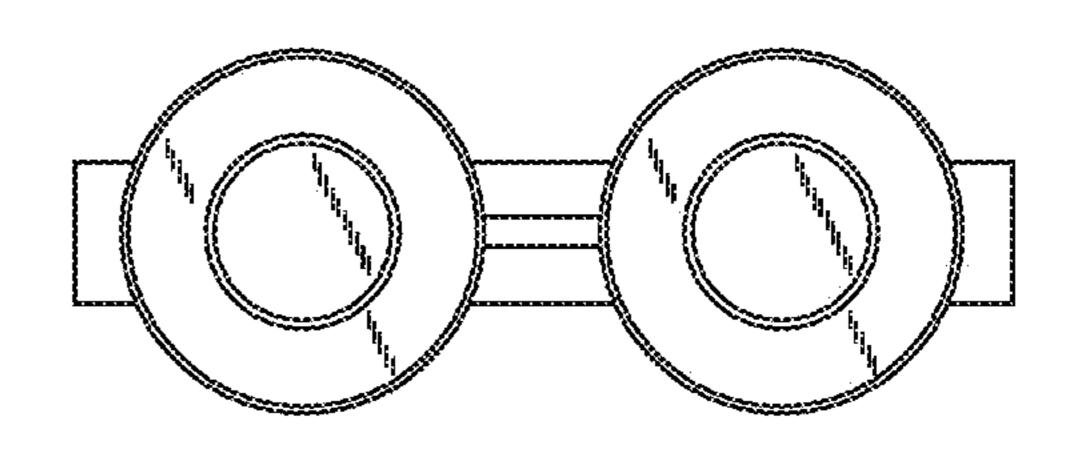


FIG. 6