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Rothkopf

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(54) **COVER ATTACHMENT WITH FLEXIBLE DISPLAY**

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G09G 5/00	(2006.01)
G06F 1/16	(2006.01)
A45C 13/00	(2006.01)
A45C 15/00	(2006.01)
A45C 11/00	(2006.01)

(52) **U.S. Cl.**

CPC ***G06F 1/1656*** (2013.01); ***A45C 11/00*** (2013.01); ***A45C 13/002*** (2013.01); ***A45C 15/00*** (2013.01); ***G06F 1/1626*** (2013.01); ***G06F 1/1632*** (2013.01); ***G06F 1/1643*** (2013.01); ***G06F 1/1647*** (2013.01); ***G06F 1/1652*** (2013.01); ***G06F 1/1654*** (2013.01); *A45C 2011/003* (2013.01); *A45C 2200/15* (2013.01)

(58) **Field of Classification Search**

CPC ... G06F 1/1669; G06F 3/0202; G06F 1/1681; G06F 1/1684; G06F 3/0414; G06F 1/1626; G06F 1/1656; G06F 2200/1633; G06F 1/1613; H01F 7/04

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,847,698	A	12/1998	Reavey et al.	
6,628,244	B1	9/2003	Hirosawa et al.	
7,489,503	B2	2/2009	Maeaettae	
7,675,511	B2	3/2010	Hattori	
7,821,780	B2	10/2010	Choy	
2001/0054647	A1 *	12/2001	Keronen et al.	235/492
2003/0098857	A1	5/2003	Gettemy	

(Continued)

FOREIGN PATENT DOCUMENTS

CN	202548700	11/2012
EP	1276090	1/2003

(Continued)

OTHER PUBLICATIONS

Int'l Search Report for App. No. PCT/US2012/021378 dated Jul. 6, 2012.

(Continued)

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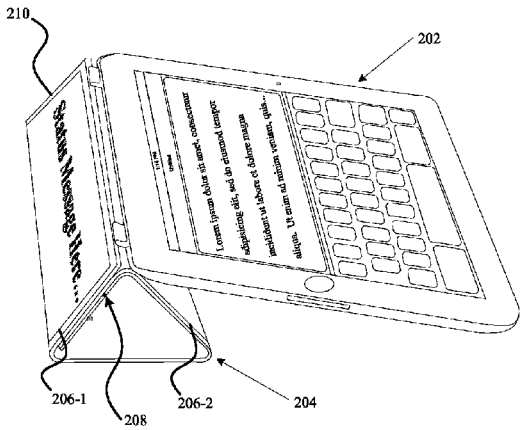
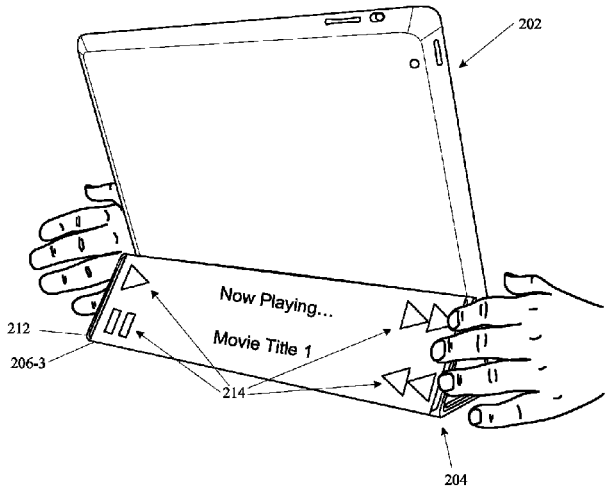
(57) **ABSTRACT**

A tablet device with a flexible cover is disclosed. Thin flexible display technology can be integrated into the flexible cover without affecting the overall form factor of the cover or tablet device. Adding the integrated display to the flexible cover greatly enhances the overall functionality of the tablet device.

23 Claims, 14 Drawing Sheets