Abstract: The invention includes methods of forming an aluminum oxynitride-comprising body. For example, a mixture is formed which comprises A:B :C in a respective molar ratio in the range of 9:3.6-6:2:0.1-1.1, where A = AlO_{x}, B = AlN, and C is a total of one or more of B_{2}O_{3}, SiO_{2}, Si-Al-O-N, and TiO_{2}. The mixture is sintered at a temperature of at least 1,600 °C at a pressure of no greater than 35.15 kg/cm² effective to form an aluminum oxynitride-comprising body which is at least internally transparent and has at least 99% maximum theoretical density.
INTERNATIONAL SEARCH REPORT

International application No
PCT/US 07/69418

A CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C03C 3/12 (2008.01 )
USPC - 65/374 13

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
USPC - 65/374 13
IPC(8) - C03C 3/12 (2006.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 65/374 13, 156/69 27, 264/604, 264/668, IPC(8) - C04B 37/00, C04B 33/34, B28B 3/00 (2008.01)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST - PGPB,USPT,USOC,EBAB,JPAB, Dialogue Classic Files / 654, 652, 351, 349, 315, 2, 6, 35, 65 Google Patents, Google Scholar

C DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>US 2004/0144244 A1 (SARGENT) 29 July 2004 (29 07 2004) para [0002], [0003], [0052], Fig 16</td>
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Date of the actual completion of the international search
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