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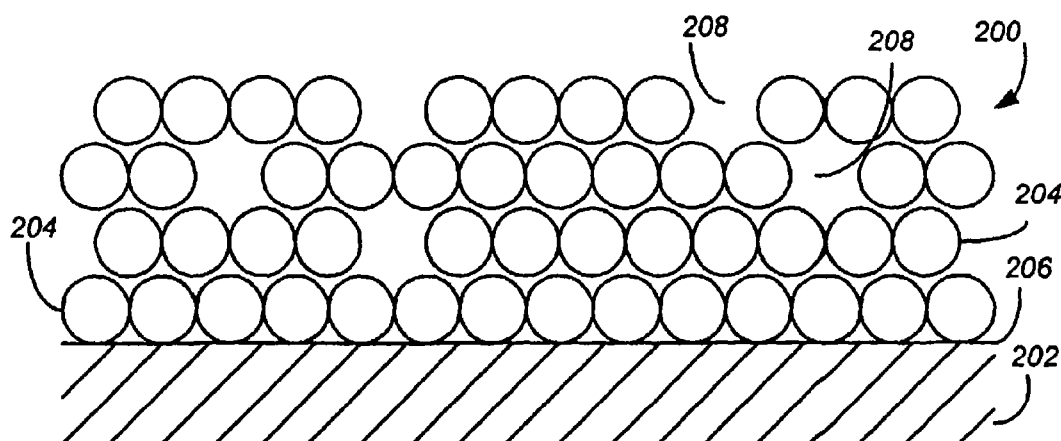
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- (71) Applicant: **SEAGATE TECHNOLOGY LLC** [US/US],
920 Disc Drive, Scotts Valley, CA 95066 (US)
- (72) Inventors: **HOEHN, Joel, W.**, 9322 83rd Street South,
Cottage Grove, MN 55347 (US) **DYKES, John, W.**, 9329
Shetland Road, Eden Prairie, MN 55347 (US) **ANGELO,
James, E.**, 14745 Portland Avenue South #214, Burnsville,
MN 55306 (US) **MOSLEY, William, D.**, 13564 Maryland
Cl., Savage, MN 55378 (US) **GREENLEE, Richard, T.**,
1508 West 15th Street, Hastings, MN 55033 (US) **KARR,
Brian, W.**, 5237 - 145th Street West, Savage, MN 55378
(US)
- (74) Agents: **DARDI, Peter, S.** et al., Westman, Champlin &
Kelly, P.A., International Centre, Suite 1600, 900 Second
Avenue South, Minneapolis, MN 55402-3319 (US)
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Title: PROCESS FOR PRODUCTION OF ULTRATHIN PROTECTIVE OVERCOATS



(57) **Abstract:** A multilayer coating (200) of fullerene molecules (204) is deposited on a substrate (202), and layers of the multilayer coating are removed leaving an approximate monolayer coating of fullerene molecules on the substrate. In some embodiments, a beam generator (250), such as an ion beam, electron beam or laser generator, produces a beam (252) arranged to break the weaker fullerene-to-fullerene intermolecular bond of the multilayer coating and inadequate to break the stronger fullerene-to-substrate association/bond of the coating. The beam (252) is directed at the multilayer coating (200) to break the fullerene-to-fullerene intermolecular bond. In other embodiments, the monolayer of fullerene molecules is formed by applying a solvent to the multilayer coating to break the fullerene-to-fullerene intermolecular bond of the multilayer coating.

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