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<p>(21) International Application Number: PCT/US99/16244</p> <p>(22) International Filing Date: 15 July 1999 (15.07.99)</p> <p>(30) Priority Data:</p> <table border="0"> <tr> <td>60/092,701</td> <td>15 July 1998 (15.07.98)</td> <td>US</td> </tr> <tr> <td>60/092,923</td> <td>15 July 1998 (15.07.98)</td> <td>US</td> </tr> <tr> <td>Not furnished</td> <td>13 July 1999 (13.07.99)</td> <td>US</td> </tr> </table> <p>(71) Applicant: AUGUST TECHNOLOGY CORPORATION [US/US]; 5327 Edina Industrial Boulevard, Edina, MN 55439 (US).</p> <p>(72) Inventors: O'DELL, Jeffrey; 11128 Road Island Avenue South, Bloomington, MN 55438 (US). HARLESS, Mark; 3717 Maryland Avenue North, New Hope, MN 55427 (US). VERBURGT, Thomas; 10217 Antlers Ridge Road, Eden Prairie, MN 55437 (US).</p> <p>(74) Agent: CZAJA, Timothy, A.; Dicke, Billig & Czaja, P.A., Suite 1250, 701 Fourth Avenue South, Minneapolis, MN 55415 (US).</p>		60/092,701	15 July 1998 (15.07.98)	US	60/092,923	15 July 1998 (15.07.98)	US	Not furnished	13 July 1999 (13.07.99)	US	<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published</p> <p><i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>
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<p>(54) Title: AN AUTOMATED WAFER DEFECT INSPECTION SYSTEM AND A PROCESS OF PERFORMING SUCH INSPECTION</p>											
<p>(57) Abstract</p> <p>An automated defect inspection system (10) has been invented and is used to inspect patterned wafers, whole wafers, broken wafers, partial wafers, wafer packs, MCMs, etc. The inspection system is specifically intended and designed for second optical wafer inspection for such defects as metalization defects, such as scratches, voids, corrosion and bridging, as well as diffusion defects, passivation layer defects, scribing defects, glassivation defects, chips and cracks from sawing, solder bump defects, and bond pad area defects.</p>											