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(12) **CORRECTED EUROPEAN PATENT APPLICATION**

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| <p>(84) Designated Contracting States:<br/> <b>AL AT BE BG CH CY CZ DE DK EE ES FI FR GB<br/> GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO<br/> PL PT RO SE SI SK SM TR</b><br/> Designated Extension States:<br/> <b>BA ME RS</b></p> | <p>(72) Inventors:<br/> <ul style="list-style-type: none"> <li>• <b>Ando, Yoshio</b><br/> Nagoya-shi Aichi 467-8585 (JP)</li> <li>• <b>Sano, Yasuhiro</b><br/> Nagoya-shi Aichi 467-8585 (JP)</li> </ul> </p> |
| <p>(30) Priority: <b>20.08.2009 JP 2009191138</b></p> <p>(71) Applicant: <b>Paloma Co., Ltd.</b><br/> <b>Mizuho-Ku,</b><br/> <b>Nagoya-Shi,</b><br/> <b>Aichi (JP)</b></p>                                                             | <p>(74) Representative: <b>Strobel, Wolfgang et al</b><br/> <b>Kroher-Strobel</b><br/> <b>Rechts- und Patentanwälte</b><br/> <b>Bavariaring 20</b><br/> <b>80336 München (DE)</b></p>                         |

(54) **Spiral pipe heat exchanger with tilted pipe sections**

(57) A spiral heat-transfer pipe (2a-2h) for heat exchange provided in a heat exchanger (1) includes: an upstream heat-transfer pipe section (22) disposed on an upstream side of a flow path of an external fluid flowing outside the spiral heat-transfer pipe (2); and a downstream heat-transfer pipe section (24) disposed on a downstream side of the flow path. Each of the heat-transfer pipe sections (22, 24) is disposed so as to extend in a direction crossing the flow path of the external fluid. Each of an axis (12) of the upstream heat-transfer pipe section (22) and an axis (14) of the downstream heat-transfer pipe section (24) is tilted with respect to a horizontal plane. Also, the axis (12) of the upstream heat-transfer pipe section (22) crosses the axis (14) of the downstream heat-transfer pipe section (24).

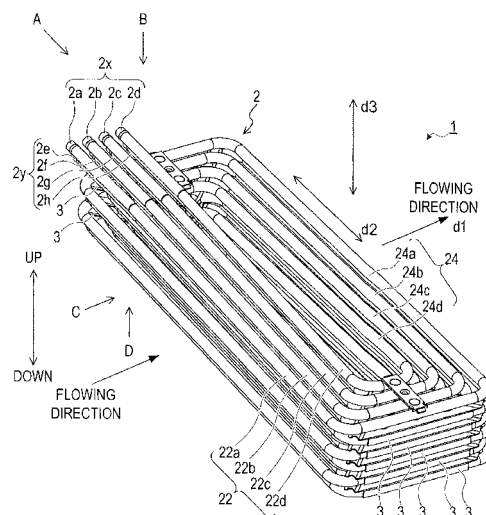


FIG.1