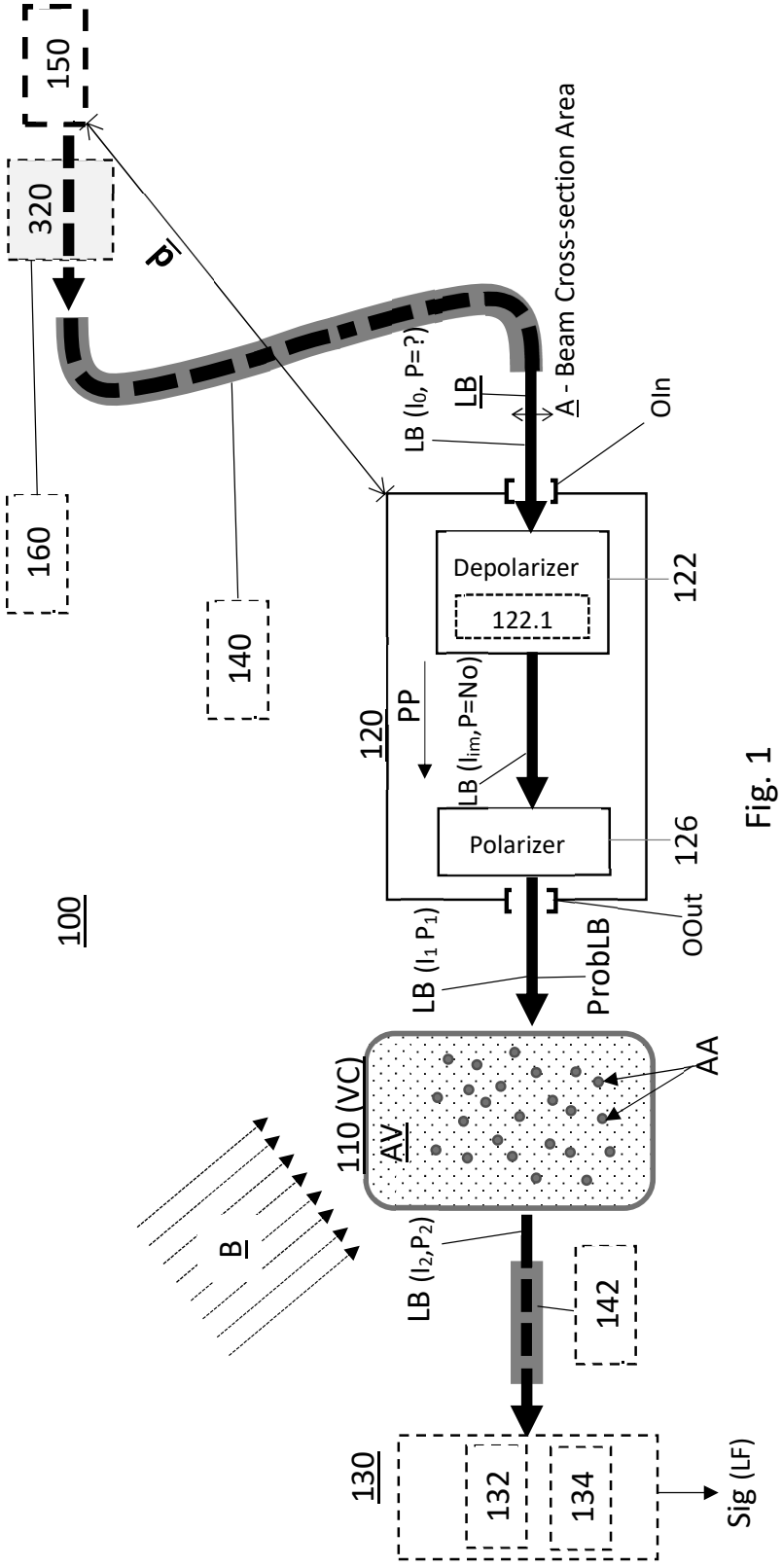

150
320
160
140
100
120
LB (I_0, P=?)
LB
A - Beam Cross-section Area
OIn
Depolarizer
122.1
122
PP
LB (I_{lim}, P=No)
Polarizer
126
OOut
LB (I_1 P_1)
ProbLB
110 (VC)
AV
AA
B
LB (I_2,P_2)
142
130
132
134
Sig (LF)

Fig. 1

Random Pattern Retarder 122.1
- Front View -

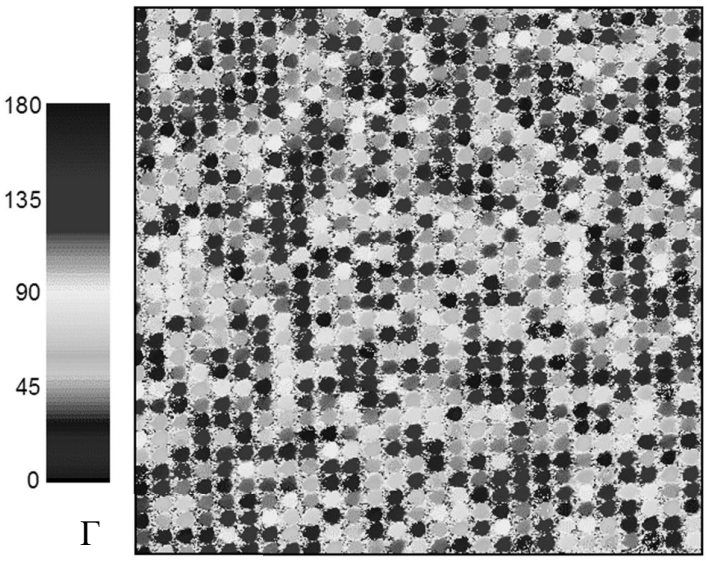


Fig. 2A

Randomized Patterned Retarder 122.1
- Perspective View -

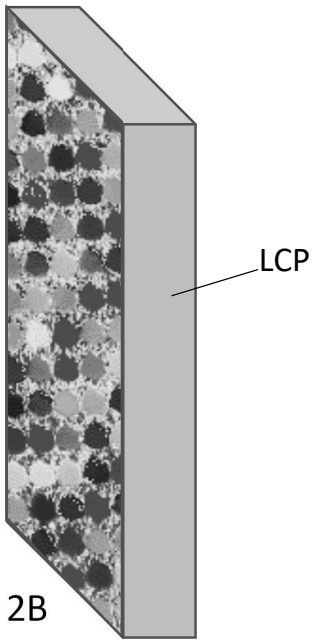


Fig. 2B

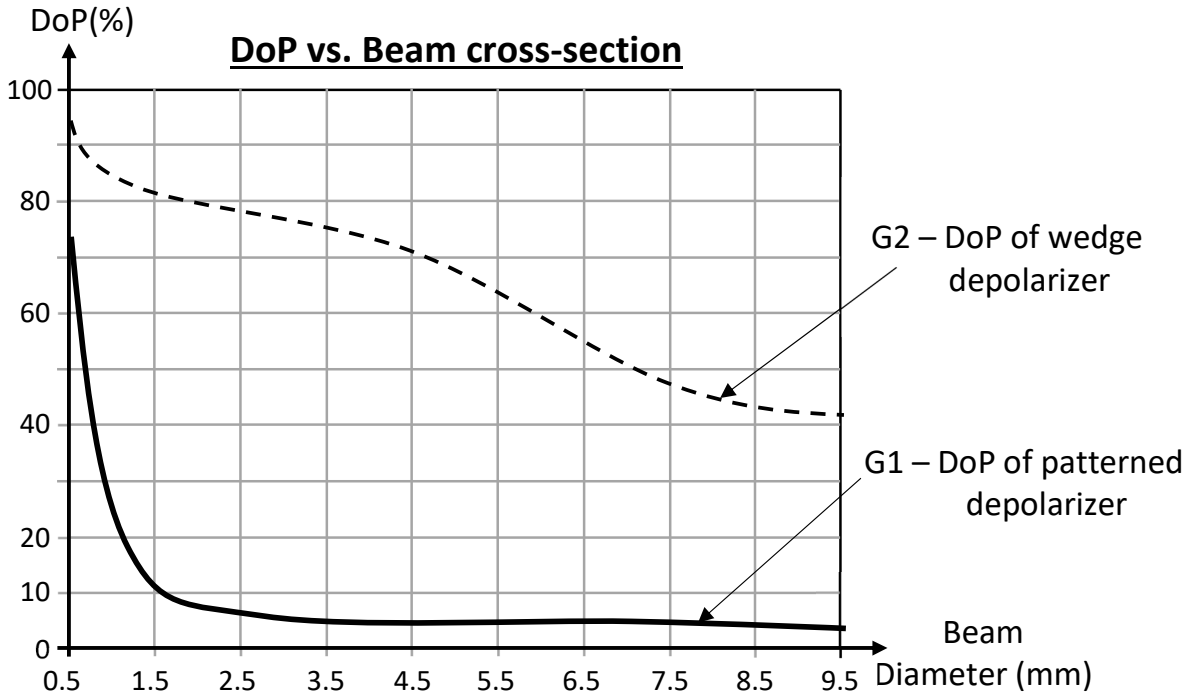


Fig. 3

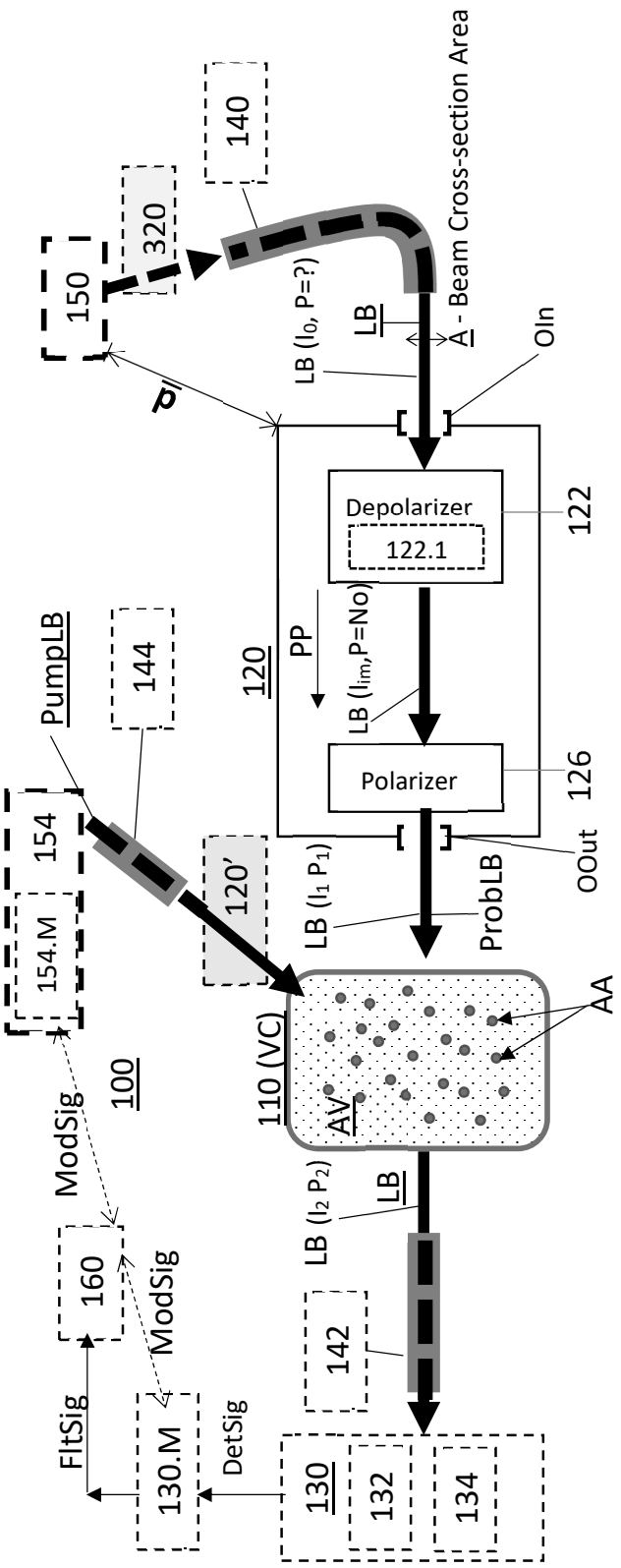

140
320
150
A - Beam Cross-section Area
LB
LB (I_0, P=?)
OIn
Depolarizer
122.1
122
PP
120
LB (I_{im},P=No)
Polarizer
126
OOut
PumpLB
144
154
154.M
120'
LB (I_1 P_1)
ProbLB
AA
110 (VC)
AV
100
ModSig
LB (I_2 P_2)
LB
160
ModSig
142
FltSig
130.M
DetSig
130
132
134

Fig. 4

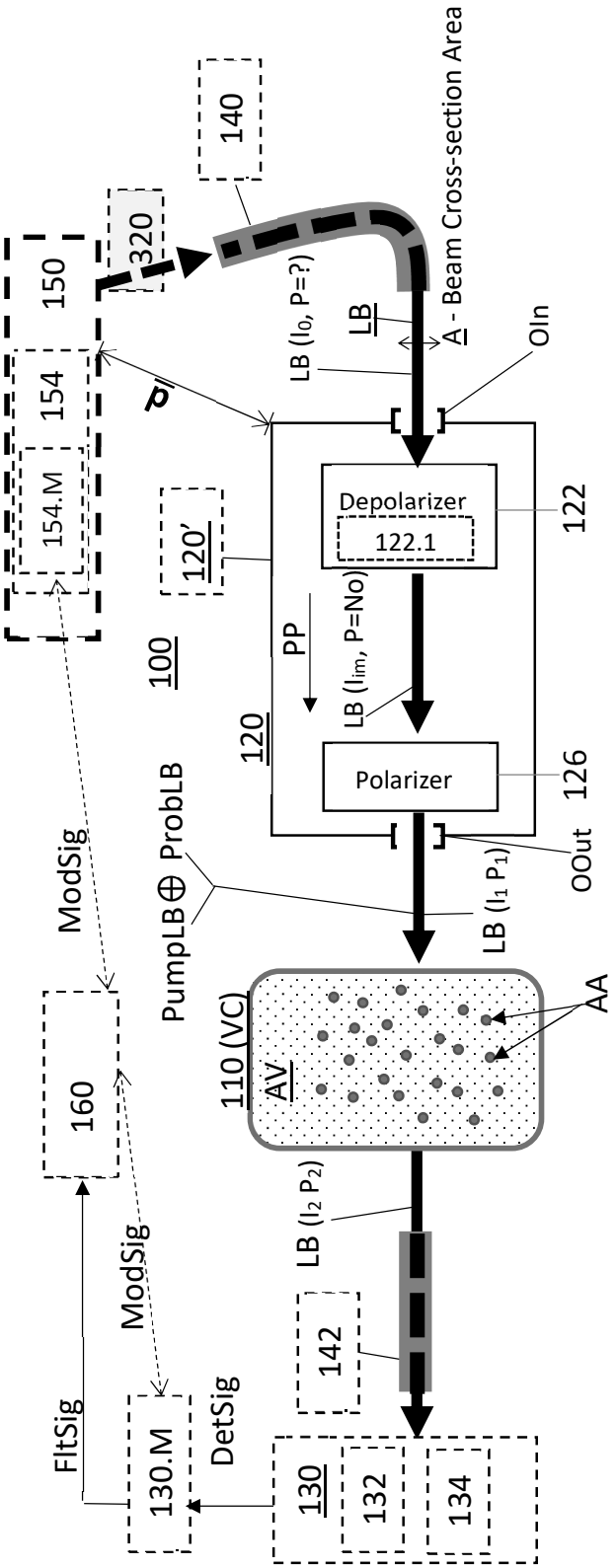

140
320
150
154
154.M
120'
100
120
122
122.1
Depolarizer
Polarizer
126
LB (I_0, P=?)
LB
A - Beam Cross-section Area
OIn
OOut
PP
LB (I_{lim}, P=No)
ProbLB ⊕ PumpLB
ModSig
LB (I_1 P_1)
110 (VC)
AV
AA
160
LB (I_2 P_2)
142
ModSig
FltSig
DetSig
130.M
130
132
134

Fig. 5

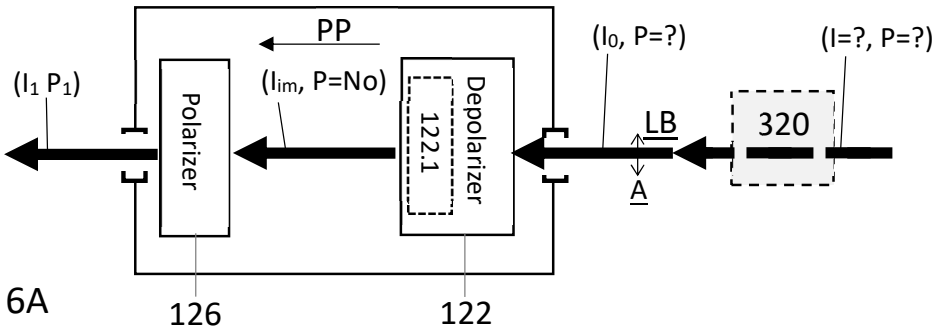


Fig. 6A

200 - Method for Optical Processing of a Light Beam

210 - providing a light beam **LB** having a certain initial intensity I_0 and undetermined polarization P_0

- **212** – said light beam is substantially monochromatic;
- **214** – said light beam has narrow characteristic cross-sectional area/ diameter

230 - depolarizing said light beam to yield the light beam with certain intermediate intensity I_{in} relative to the initial intensity I_0 and un-polarized polarization state;

- **232 –** Carrying out said depolarizing by utilizing a random spatial pattern retarder for spatially randomizing the polarizations of a plurality of different cross-sectional regions within a cross-sectional area **A** of the light beam;

250 - subsequently to said depolarizing **230**, polarizing said light beam to said predetermined polarization state P_1

270 - yielding said light beam **LB** with a certain predetermined intensity I_1 relative to said initial intensity I_0 and certain predetermined polarization state P_1;

290 – Optionally adjusting the initial intensity I_0 of the light beam according to intensity attenuation affected thereon by operations 230 and 250, to yield the light beam with a designated intensity I_1 and said predetermined polarization state P_1;

Fig. 6B

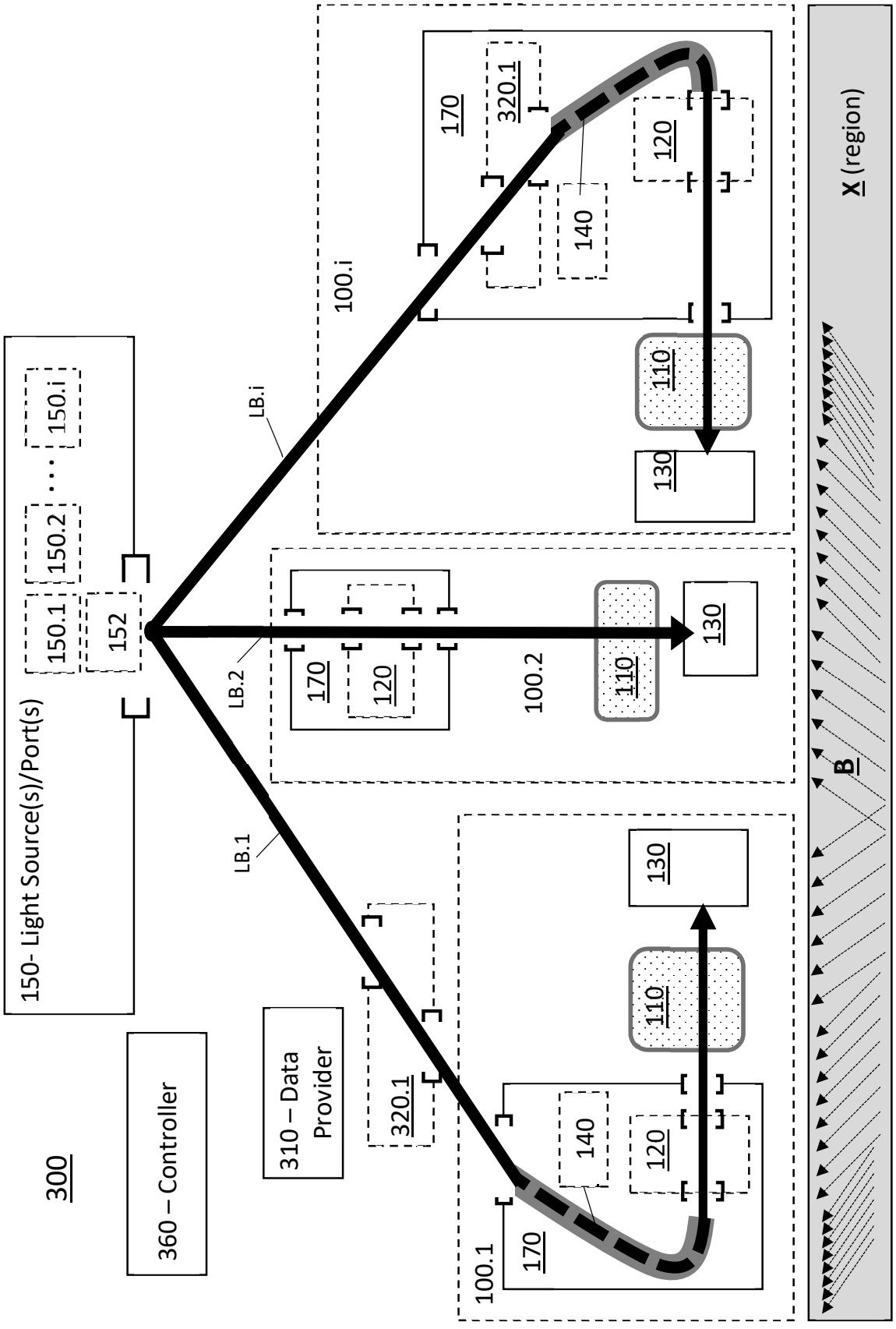

300
360 – Controller
150- Light Source(s)/Port(s)
150.1
150.2
150.i
152
310 – Data Provider
320.1
LB.1
LB.2
LB.i
100.1
100.2
100.i
170
120
140
110
130
320.1
B
X (region)

Fig. 7