$$A\overline{B} \vee A\overline{C}\,(\overline{A\overline{B}\,\overline{\overline{C}}} \vee \overline{A}\,\overline{B}) = A\overline{B} \vee A\overline{C}\,(\overline{A} \vee \overline{B} \vee \overline{\overline{C}} \vee \overline{A}\,\overline{B}) = A\overline{B} \vee A\overline{C}\,((\overline{A} \vee \overline{A}\,\overline{B}) \vee \overline{B} \vee C) =$$

$$= A\overline{B} \vee A\overline{C}\,(\overline{A} \vee \overline{B} \vee C) = A\overline{B} \vee A\overline{A}\,\overline{C} \vee A\overline{B}\,\overline{C} \vee AC\overline{C} = A\overline{B} \vee \bot \vee A\overline{B}\,\overline{C} \vee \bot =$$

$$= A\overline{B} \vee A\overline{B}\,\overline{C} = A\overline{B} = \overline{\overline{A\overline{B}}} = \overline{\overline{A} \vee \overline{\overline{B}}} = \overline{\overline{A} \vee B} = \overline{A} \downarrow B = (A \downarrow A) \downarrow B$$