3°. conforming to Wallman's disjunction property.

PROOF. By theorem 180. □

REMARK 654. For more ways to characterize (atomic) separability of the lattice of funcoids see subsections "Separation subsets and full stars" and "Atomically separable lattices".

COROLLARY 655. The lattice $\mathsf{FCD}(A; B)$ is an atomistic lattice.

PROOF. FiXme: Should be generalized.Let $f \in \mathsf{FCD}(A; B)$. Suppose contrary to the statement to be proved that $\bigsqcup \operatorname{atoms} f \sqsubset f$. Then there exists $a \in \operatorname{atoms} f$ such that $a \sqcap \bigsqcup \operatorname{atoms} f = \bot^{\mathsf{FCD}(A;B)}$ what is impossible. □

PROPOSITION 656. $\operatorname{atoms}(f \sqcup g) = \operatorname{atoms} f \cup \operatorname{atoms} g$ for every funcoids $f, g \in \mathsf{FCD}(A; B)$ (for every sets A, B).

PROOF. $a \times^{\mathsf{FCD}} b \not\asymp f \sqcup g \Leftrightarrow a\ [f \sqcup g]\ b \Leftrightarrow a\ [f]\ b \vee a\ [g]\ b \Leftrightarrow a \times^{\mathsf{FCD}} b \not\asymp f \vee a \times^{\mathsf{FCD}} b \not\asymp g$ for every atomic filters a and b. □

THEOREM 657. For every $f, g, h \in \mathsf{FCD}(A; B)$, $R \in \mathscr{P}\mathsf{FCD}(A; B)$ (for every sets A and B)

1°. $f \sqcap (g \sqcup h) = (f \sqcap g) \sqcup (f \sqcap h)$;
2°. $f \sqcup \bigsqcap R = \bigsqcap \langle f \sqcup \rangle^* R$.

PROOF. We will take into account that the lattice of funcoids is an atomistic lattice.

1°.

$$\begin{aligned}
&\operatorname{atoms}(f \sqcap (g \sqcup h)) = \\
&\operatorname{atoms} f \cap \operatorname{atoms}(g \sqcup h) = \\
&\operatorname{atoms} f \cap (\operatorname{atoms} g \cup \operatorname{atoms} h) = \\
&(\operatorname{atoms} f \cap \operatorname{atoms} g) \cup (\operatorname{atoms} f \cap \operatorname{atoms} h) = \\
&\operatorname{atoms}(f \sqcap g) \cup \operatorname{atoms}(f \sqcap h) = \\
&\operatorname{atoms}((f \sqcap g) \sqcup (f \sqcap h)).
\end{aligned}$$